APPENDIX 3

TR_DMT.PDB

REMARK TR_dmt full length numbering
REMARK
REMARK Rfactor 0.205 Rfree 0.227
REMARK Resolution 15. 2.2 all reflections
REMARK
REMARK Three cacodylate-modified cysteines (CYA)
REMARK Cya334, Cya380, Cya392
REMARK cacodylate modeled as single arsenic atom
REMARK
REMARK side chain of certain residues modeled as ALA due to poor density;
REMARK however, residue name reflects true residue for clarity
REMARK
REMARK clone obtained from Murray et. al.
REMARK deposited sequence confirmed,
REMARK differing from that reported by Thompson et. al.
REMARK in the following codons:
REMARK 281 Thr - Ala
REMARK 285 Lys - Glu
REMARK identical to that reported by Mitsuhashi et. al.
REMARK gb:RNTRAVI X07409
JRNL   AUTH   M.B. MURRAY, N.D.ZILZ, N.L.MCCREARY,M.J.MACDONALD
JRNL   AUTH 2 H.C.TOWLE
JRNL   TITL   ISOLATION AND CHARACTERIZATION OF RAT CDNA CLONES FOR TWO
JRNL   TITL 2 DISTINCT THYROID HORMONE RECPTORS
JRNL   REF   JBC   V. 263 25 1988
JRNL   AUTH   C.C.THOMPSON, C.WEINBERGER, R.LEBO, R.M.EVANS
JRNL   TITL   IDENTIFICATION OF A NOVEL THYROID HORMONE RECEPTOR EXPRESSED
JRNL   TITL 2 IN THE MAMMALIAN CENTRAL NERVOUS SYSTEM
JRNL   REF   SCIENCE   V. 237   1987
JRNL   AUTH   T.MITSUHASHI,G.TENNYSON,V.NIKODEM
JRNL   TITL   NUCLEOTIDE SEQUENCE OF NOVEL CDNAS GENERATED BY ALTERNATIVE
JRNL   TITL 2 SPLICING OF A RAT THYROID HORMONE RECEPTOR GENE TRANSCRIPT
JRNL   REF   NUC. ACIDS. RES.   V. 16 12 1988
ATOM   1 N   ARG   157   68.504 8.445 5.651 1.00 68.93
ATOM   2 CA ARG   157   67.886 9.543 6.398 1.00 56.98
ATOM   3 CB ARG   157   68.769 10.789 6.324 1.00 59.25
ATOM   4 CG ARG   157   70.147 10.632 6.932 1.00 58.90

ATOM	5	CD	ARG	157	70.068	10.422	8.425	1.00	59.37
ATOM	6	NE	ARG	157	71.392	10.446	9.036	1.00	63.94
ATOM	7	CZ	ARG	157	71.613	10.329	10.341	1.00	64.39
ATOM	8	NH1	ARG	157	70.596	10.182	11.179	1.00	62.14
ATOM	9	NH2	ARG	157	72.855	10.365	10.808	1.00	65.56
ATOM	10	C ˉ	ARG	157	66.500	9.881	5.854	1.00	48.97
ATOM	11	O	ARG	157	66.351	10.203	4.674	1.00	48.61
ATOM	12	N	PRO	158	65.469	9.818	6.712	1.00	41.90
ATOM	13	CD	PRO	158	65.550	9.366	8.112	1.00	41.06
ATOM	14	CA	PRO	158	64.083	10.114	6.333	1.00	39.34
ATOM	15	CB	PRO	158	63.286	9.704	7.576	1.00	37.89
ATOM	16	CG	PRO	158	64.260	9.883	8.693	1.00	42.40
ATOM	17	C	PRO	158	63.814	11.573	5.930	1.00	37.10
ATOM	18	O	PRO	158	64.189	12.517	6.636	1.00	33.31
ATOM	19	N	GLU	159	63.171	11.733	4.778	1.00	30.56
ATOM	20	CA	GLU	159	62.821	13.038	4.231	1.00	24.26
ATOM	21	CB	GLU	159	62.553	12.904	2.727	1.00	19.19
ATOM	22	CG	GLU	159	63.788	12.677	1.874	1.00	20.60
ATOM	23	CD	GLU	159	64.407	13.971	1.390	1.00	26.54
ATOM	24	OE1	GLU	159	63.649	14.929	1.115	1.00	30.85
ATOM	25	OE2	GLU	159	65.649	14.027	1.268	1.00	28.35
ATOM	26	C	GLU	159	61.549	13.520	4.909	1.00	23.26
ATOM	27	O	GLU	159	60.906	12.765	5.643	1.00	26.86
ATOM	28	N	PRO	160	61.200	14.806	4.729	1.00	22.72
ATOM	29	CD	PRO	160	61.981	15.916	4.153	1.00	17.87
ATOM	30	CA	PRO	160	59.969	15.292	5.359	1.00	19.90
ATOM	31	CB	PRO	160	60.004	16.799	5.070	1.00	14.42
ATOM	32	CG	PRO	160	61.465	17.109	4.919	1.00	12.87
ATOM	33	C	PRO	160	58.747	14.623	4.701	1.00	23.68
ATOM	34	O	PRO	160	58.730	14.383	3.491	1.00	24.72
ATOM	35	N	THR	161	57.749	14.281	5.506	1.00	22.19
ATOM	36	CA	THR	161	56.542	13.660	4.985	1.00	19.50
ATOM	37	CB	THR	161	55.691	13.031	6.125	1.00	21.50
ATOM	38	OG1	THR	161	55.163	14.062	6.972	1.00	20.33
ATOM	39	CG2	THR	161	56.537	12.078	6.959	1.00	19.48
ATOM	40	C	THR	161	55.744	14.765	4.298	1.00	22.86
ATOM	41	O	THR	161	56.040	15.949	4.481	1.00	27.68
ATOM	42	N	PRO	162	54.720	14.403	3.504	1.00	20.36
ATOM	43	CD	PRO	162	54.280	13.050	3.113	1.00	16.55
ATOM	44	CA	PRO	162	53.924	15.435	2.830	1.00	21.97
ATOM	45	CB	PRO	162	52.780	14.633	2.210	1.00	18.17
ATOM	46	CG	PRO	162	53.422	13.316	1.905	1.00	18.01
ATOM	47	C	PRO	162	53.399	16.467	3.826	1.00	22.56
ATOM	48	O	PRO	162	53.461	17.675	3.567	1.00	21.73
ATOM	49	N	GLU	163	52.912	15.976	4.967	1.00	25.28
ATOM	50	CA	GLU	163	52.357	16.816	6.030	1.00	26.64
ATOM	51	CB	GLU	163	51.743	15.962	7.144	1.00	30.22

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ATOM	52	CG	GLU	163	50.514	15.131	6.748	1.00	44.99
ATOM	53	CD	GLU	163	50.836	13.950	5.831	1.00	48.88
ATOM	54	OE1	GLU	163	50.016	13.660	4.929	1.00	52.48
ATOM	55	OE2	GLU	163	51.895	13.309	6.015	1.00	44.23
ATOM	56	C	GLU	163	53.414	17.731	6.634	1.00	27.65
ATOM	57	O ·	GLU	163	53.114	18.862	7.034	1.00	29.30
ATOM	58	N	GLU	164	54.646	17.235	6.712	1.00	21.89
ATOM	59	CA	GLU	164	55.741	18.015	7.265	1.00	18.29
ATOM	60	CB	GLU	164	56.901	17.109	7.657	1.00	14.78
ATOM	61	CG	GLU	164	56.552	16.196	8.825	1.00	21.11
ATOM	62	CD	GLU	164	57.669	15.249	9.198	1.00	20.35
ATOM	63	OE1	GLU	164	58.605	15.071	8.392	1.00	28.55
ATOM	64	OE2	GLU	164	57.610	14.677	10.302	1.00	28.25
ATOM	65	C	GLU	164	56.200	19.097	6.306	1.00	24.62
ATOM	66	O	GLU	164	56.574	20.183	6.741	1.00	32.05
ATOM	67	N	TRP	165	56.174	18.817	5.003	1.00	28.22
ATOM	68	CA	TRP	165	56.576	19.825	4.021	1.00	22.99
ATOM	69	CB	TRP	165	56.575	19.262	2.605	1.00	17.37
ATOM	70	CG	TRP	165	57.876	18.633	2.210	1.00	10.74
ATOM	71	CD2	TRP	165	59.153	19.283	2.109	1.00	11.74
ATOM	72	CE2	TRP	165	60.075	18.319	1.648	1.00	9.97
ATOM	73	CE3	TRP	165	59.606	20.583	2.365	1.00	13.88
ATOM	74	CD1	TRP	165	58.074	17.343	1.832	1.00	9.17
ATOM	75	NE1	TRP	165	59.390	17.145	1.486	1.00	16.55
ATOM	76	CZ2	TRP	165	61.427	18.613	1.436	1.00	13.37
ATOM	77	CZ3	TRP	165	60.954	20.874	2.156	1.00	16.15
ATOM	78	CH2	TRP	165	61.846	19.892	1.696	1.00	17.42
ATOM	79	C	TRP	165	55.634	21.015	4.115	1.00	21.44
ATOM	80	O	TRP	165	56.041	22.149	3.865	1.00	22.12
ATOM	81	N	ASP	166	54.373	20.747	4.456	1.00	21.29
ATOM	82	CA	ASP	166	53.369	21.796	4.621	1.00	25.77
ATOM	83	CB ·	ASP	166	51.972	21.196	4.808	1.00	26.02
ATOM	84	CG	ASP	166	51.428	20.559	3.539	1.00	33.01
ATOM	85	OD1	ASP	166	51.874	20.932	2.434	1.00	29.48
ATOM	86	OD2	ASP	166	50.537	19.692	3.649	1.00	34.47
ATOM	87	C	ASP	166	53.732	22.637	5.842	1.00	27.91
ATOM	88	O	ASP	166	53.744	23.865	5.767	1.00	31.28
ATOM	89	N	LEU	167	54.046	21.966	6.951	1.00	25.57
ATOM	90	CA	LEU	167	54.439	22.640	8.187	1.00	28.28
ATOM	91	CB	LEU	167	54.854	21.624	9.256	1.00	32.80
ATOM	92	CG	LEU	167	53.945	21.347	10.455	1.00	41.75
ATOM	93	CD1	LEU	167	54.765	20.640	11.532	1.00	39.15
ATOM	94	CD2	LEU	167	53.374	22.647	11.008	1.00	39.20
ATOM	95	C	LEU	167	55.636	23.532	7.902	1.00	22.19
ATOM	96	O	LEU	167	55.671	24.700	8.302	1.00	29.51
ATOM	97	N	ILE	168	56.610	22.957	7.206	1.00	15.01
ATOM	98	CA	ILE	168	57.846	23.632	6.833	1.00	18.03

ATOM	99	CB	ILE	168	58.756	22.668	6.040	1.00	11.37
ATOM	100	CG2	ILE	168	59.890	23.413	5.367	1.00	16.36
ATOM	101	CG1	ILE	168	59.289	21.580	6.975	1.00	21.63
ATOM	102	CD1	ILE	168	60.095	20.501	6.287	1.00	21.03
ATOM	103	C	ILE	168	57.579	24.897	6.022	1.00	22.54
ATOM	104	O⁻	ILE	168	58.155	25.948	6.300	1.00	24.88
ATOM	105	N	HIS	169	56.682	24.800	5.045	1.00	25.70
ATOM	106	CA	HIS	169	56.337	25.934	4.190	1.00	21.28
ATOM	107	CB	HIS	169	55.411	25.493	3.057	1.00	22.29
ATOM	108	CG	HIS	169	56.047	24.543	2.091	1.00	23.11
ATOM	109	CD2	HIS	169	57.348	24.265	1.839	1.00	16.86
ATOM	110	ND1	HIS	169	55.312	23.721	1.263	1.00	25.30
ATOM	111	CE1	HIS	169	56.130	22.974	0.546	1.00	15.89
ATOM	112	NE2	HIS	169	57.371	23.283	0.878	1.00	25.38
ATOM	113	C	HIS	169	55.664	27.048	4.976	1.00	18.32
ATOM	114	O	HIS	169	56.033	28.215	4.842	1.00	21.53
ATOM	115	N	VAL	170	54.679	26.685	5.795	1.00	17.13
ATOM	116	CA	VAL	170	53.957	27.661	6.607	1.00	21.29
ATOM	117	CB	VAL	170	52.808	26.991	7.399	1.00	24.33
ATOM	118	CG1	VAL	170	52.164	27.985	8.354	1.00	23.78
ATOM	119	CG2	VAL	170	51.760	26.439	6.435	1.00	18.87
ATOM	120	C	VAL	170	54.910	28.382	7.567	1.00	24.69
ATOM	121	O	VAL	170	54.912	29.616	7.637	1.00	28.77
ATOM	122	N	ALA	171	55.759	27.609	8.245	1.00	20.35
ATOM	123	CA	ALA	171	56.722	28.148	9.202	1.00	19.61
ATOM	124	CB	ALA	171	57.393	27.013	9.977	1.00	17.52
ATOM	125	C	ALA	171	57.775	29.026	8.531	1.00	20.91
ATOM	126	O	ALA	171	58.102	30.105	9.041	1.00	21.98
ATOM	127	N	THR	172	58.308	28.571	7.398	1.00	18.94
ATOM	128	CA	THR	172	59.313	29.342	6.668	1.00	19.55
ATOM	129	CB	THR	172	59.820	28.594	5.413	1.00	20.49
ATOM	130	OG1	THR	172	60.394	27.336	5.795	1.00	20.66
ATOM	131	CG2	THR	172	60.894	29.418	4.702	1.00	20.44
ATOM	132	C	THR	172	58.730	30.697	6.254	1.00	23.26
ATOM	133	O	THR	172	59.403	31.724	6.334	1.00	24.32
ATOM	134	N	GLU	173	57.468	30.694	5.836	1.00	27.42
ATOM	135	CA	GLU	173	56.797	31.922	5.434	1.00	27.68
ATOM	136	CB	GLU	173	55.477	31.605	4.728	1.00	24.51
ATOM	137	CG	GLU	173	54.652	32.836	4.338	1.00	39.69
ATOM	138	CD	GLU	173	55.396	33.814	3.426	1.00	47.72
ATOM	139	OE1	GLU	173	55.019	35.009	3.417	1.00	48.26
ATOM	140	OE2	GLU	173	56.344	33.398	2.717	1.00	49.61
ATOM	141	C	GLU	173	56.557	32.834	6.641	1.00	25.68
ATOM	142	O	GLU	173	56.773	34.046	6.559	1.00	23.39
ATOM	143	N	ALA	174	56.119	32.245	7.755	1.00	25.19
ATOM	144	CA	ALA	174	55.863	32.989	8.993	1.00	22.25
ATOM	145	CB	ALA	174	55.450	32.030	10.111	1.00	15.95

ATOM	146	C	ALA	174	57.125	33.747	9.391	1.00	23.22
ATOM	147	O	ALA	174	57.076	34.918	9.768	1.00	24.52
ATOM	148	N	HIS	175	58.261	33.073	9.275	1.00	20.97
ATOM	149	CA	HIS	175	59.544	33.665	9.606	1.00	19.55
ATOM	150	CB	HIS	175	60.625	32.577	9.649	1.00	16.19
ATOM	151	CG	HIS	175	62.016	33.104	9.835	1.00	18.89
ATOM	152	CD2	HIS	175	63.148	32.901	9.119	1.00	16.05
ATOM	153	ND1	HIS	175	62.359	33.962	10.859	1.00	13.83
ATOM	154	CE1	HIS	175	63.642	34.265	10.765	1.00	15.87
ATOM	155	NE2	HIS	175	64.143	33.635	9.718	1.00	19.19
ATOM	156	C	HIS	175	59.934	34.757	8.617	1.00	21.28
ATOM	157	O	HIS	175	60.274	35.869	9.014	1.00	25.12
ATOM	158	N	ARG	176	59.891	34.436	7.329	1.00	26.73
ATOM	159	CA	ARG	176	60.266	35.387	6.292	1.00	27.13
ATOM	160	CB	ARG	176	60.156	34.748	4.914	1.00	36.00
ATOM	161	CG	ARG	176	61.286	33.795	4.602	1.00	43.20
ATOM	162	CD	ARG	176	61.197	33.334	3.170	1.00	50.07
ATOM	163	NE	ARG	176	62.316	32.477	2.813	1.00	58.20
ATOM	164	CZ	ARG	176	62.266	31.548	1.867	1.00	67.22
ATOM	165	NH1	ARG	176	61.143	31.358	1.182	1.00	67.62
ATOM	166	NH2	ARG	176	63.336	30.806	1.612	1.00	70.56
ATOM	167	C	ARG	176	59.487	36.688	6.325	1.00	23.97
ATOM	168	O	ARG	176	60.073	37.760	6.209	1.00	24.52
ATOM	169	N	SER	177	58.177	36.598	6.515	1.00	23.60
ATOM	170	CA	SER	177	57.341	37.789	6.565	1.00	26.36
ATOM	171	CB	SER	177	55.865	37.407	6.439	1.00	21.93
ATOM	172	OG	SER	177	55.495	36.459	7.423	1.00	25.97
ATOM	173	C	SER	177	57.557	38.623	7.829	1.00	28.76
ATOM	174	O	SER	177	57.084	39.761	7.907	1.00	33.09
ATOM	175	N	THR	178	58.257	38.062	8.815	1.00	25.52
ATOM	176	CA	THR	178	58.508	38.772	10.064	1.00	18.93
ATOM	177	CB	THR	178	57.828	38.064	11.258	1.00	21.81
ATOM	178	OG1	THR	178	58.348	36.736	11.394	1.00	24.18
ATOM	179	CG2	THR	178	56.330	37.971	11.032	1.00	13.81
ATOM	180	C	THR	178	59.993	38.967	10.358	1.00	20.69
ATOM	181	O	THR	178	60.373	39.407	11.448	1.00	20.56
ATOM	182	N	ASN	179	60.837	38.645	9.385	1.00	23.68
ATOM	183	CA	ASN	179	62.275	38.802	9.555	1.00	28.22
ATOM	184	CB	ASN	179	63.022	37.627	8.927	1.00	27.45
ATOM	185	CG	ASN	179	64.460	37.529	9.402	1.00	33.98
ATOM	186	OD1	ASN	179	65.342	37.131	8.644	1.00	42.72
ATOM	187	ND2	ASN	179	64.702	37.865	10.667	1.00	31.14
ATOM	188	C	ASN	179	62.689	40.115	8.902	1.00	34.47
ATOM	189	O	ASN	179	62.832	40.200	7.678	1.00	36.54
ATOM	190	N	ALA	180	62.874	41.135	9.735	1.00	37.39
ATOM	191	CA	ALA	180	63.235	42.479	9.292	1.00	33.71
ATOM	192	CB	ALA	180	63.555	43.352	10.494	1.00	31.57

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ATOM    193  C   ALA   180     64.375  42.545   8.284  1.00 37.87
ATOM    194  O   ALA   180     65.458  42.018   8.525  1.00 35.26
ATOM    195  N   GLN   181     64.095  43.187   7.150  1.00 40.55
ATOM    196  CA  GLN   181     65.049  43.391   6.057  1.00 42.95
ATOM    197  CB  GLN   181     66.344  44.043   6.570  1.00 45.47
ATOM    198  CG  GLN   181     66.144  45.326   7.383  1.00 52.70
ATOM    199  CD  GLN   181     65.351  46.399   6.650  1.00 55.03
ATOM    200  OE1 GLN   181     65.270  46.412   5.421  1.00 59.56
ATOM    201  NE2 GLN   181     64.757  47.308   7.411  1.00 54.39
ATOM    202  C   GLN   181     65.391  42.176   5.197  1.00 44.27
ATOM    203  O   GLN   181     66.181  42.291   4.251  1.00 46.47
ATOM    204  N   GLY   182     64.797  41.025   5.508  1.00 42.17
ATOM    205  CA  GLY   182     65.054  39.815   4.742  1.00 42.63
ATOM    206  C   GLY   182     66.522  39.584   4.427  1.00 47.40
ATOM    207  O   GLY   182     67.382  39.691   5.306  1.00 49.38
ATOM    208  N   SER   183     66.816  39.297   3.163  1.00 49.46
ATOM    209  CA  SER   183     68.189  39.061   2.733  1.00 54.13
ATOM    210  CB  SER   183     68.208  38.225   1.449  1.00 55.08
ATOM    211  OG  SER   183     67.197  38.647   0.546  1.00 63.54
ATOM    212  C   SER   183     68.949  40.369   2.532  1.00 54.84
ATOM    213  O   SER   183     70.175  40.373   2.407  1.00 56.90
ATOM    214  N   HIS   184     68.223  41.482   2.535  1.00 55.77
ATOM    215  CA  HIS   184     68.854  42.775   2.342  1.00 57.78
ATOM    216  C   HIS   184     69.605  43.296   3.556  1.00 59.09
ATOM    217  O   HIS   184     70.312  44.301   3.454  1.00 60.34
ATOM    218  N   TRP   185     69.502  42.597   4.686  1.00 55.60
ATOM    219  CA  TRP   185     70.159  43.020   5.923  1.00 53.73
ATOM    220  CB  TRP   185     69.973  41.973   7.030  1.00 50.40
ATOM    221  CG  TRP   185     70.746  40.694   6.837  1.00 48.09
ATOM    222  CD2 TRP   185     72.091  40.419   7.269  1.00 47.38
ATOM    223  CE2 TRP   185     72.390  39.094   6.888  1.00 40.29
ATOM    224  CE3 TRP   185     73.071  41.169   7.937  1.00 45.43
ATOM    225  CD1 TRP   185     70.301  39.554   6.234  1.00 49.87
ATOM    226  NE1 TRP   185     71.280  38.589   6.262  1.00 48.02
ATOM    227  CZ2 TRP   185     73.628  38.496   7.154  1.00 38.65
ATOM    228  CZ3 TRP   185     74.304  40.573   8.201  1.00 43.26
ATOM    229  CH2 TRP   185     74.570  39.250   7.807  1.00 40.00
ATOM    230  C   TRP   185     71.638  43.386   5.800  1.00 55.99
ATOM    231  O   TRP   185     72.089  44.359   6.401  1.00 52.84
ATOM    232  N   LYS   186     72.389  42.614   5.021  1.00 59.15
ATOM    233  CA  LYS   186     73.818  42.863   4.843  1.00 64.01
ATOM    234  CB  LYS   186     74.466  41.688   4.091  1.00 64.67
ATOM    235  CG  LYS   186     75.943  41.868   3.729  1.00 65.58
ATOM    236  CD  LYS   186     76.817  42.181   4.946  1.00 62.03
ATOM    237  CE  LYS   186     78.238  42.512   4.515  1.00 61.52
ATOM    238  NZ  LYS   186     78.988  43.243   5.579  1.00 61.67
ATOM    239  C   LYS   186     74.131  44.203   4.160  1.00 67.49
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ATOM	240	O	LYS	186	75.164	44.816	4.432	1.00	68.66
ATOM	241	N	GLN	187	73.221	44.678	3.316	1.00	68.99
ATOM	242	CA	GLN	187	73.431	45.939	2.612	1.00	69.65
ATOM	243	CB	GLN	187	72.880	45.867	1.180	1.00	73.76
ATOM	244	CG	GLN	187	73.632	44.935	0.237	1.00	78.61
ATOM	245	CD	GLN	187	73.368	43.471	0.525	1.00	84.96
ATOM	246	OE1	GLN	187	74.203	42.782	1.109	1.00	87.73
ATOM	247	NE2	GLN	187	72.197	42.989	0.122	1.00	84.98
ATOM	248	C	GLN	187	72.817	47.141	3.323	1.00	69.16
ATOM	249	O	GLN	187	73.379	48.235	3.299	1.00	71.39
ATOM	250	N	ARG	188	71.666	46.936	3.953	1.00	65.82
ATOM	251	CA	ARG	188	70.961	48.014	4.639	1.00	65.00
ATOM	252	CB	ARG	188	69.458	47.739	4.591	1.00	66.20
ATOM	253	CG	ARG	188	68.957	47.483	3.181	1.00	70.30
ATOM	254	CD	ARG	188	67.463	47.212	3.132	1.00	78.59
ATOM	255	NE	ARG	188	67.003	47.008	1.760	1.00	87.71
ATOM	256	CZ	ARG	188	67.011	47.946	0.814	1.00	94.10
ATOM	257	NH1	ARG	188	67.453	49.171	1.081	1.00	97.26
ATOM	258	NH2	ARG	188	66.589	47.657	-0.409	1.00	94.07
ATOM	259	C	ARG	188	71.409	48.286	6.077	1.00	65.39
ATOM	260	O	ARG	188	70.900	49.201	6.727	1.00	65.20
ATOM	261	N	ARG	189	72.372	47.506	6.561	1.00	64.28
ATOM	262	CA	ARG	189	72.882	47.654	7.922	1.00	60.75
ATOM	263	CB	ARG	189	73.691	46.409	8.321	1.00	56.87
ATOM	264	CG	ARG	189	75.050	46.308	7.630	1.00	59.52
ATOM	265	CD	ARG	189	75.580	44.891	7.589	1.00	55.86
ATOM	266	NE	ARG	189	75.874	44.348	8.907	1.00	55.48
ATOM	267	CZ	ARG	189	77.055	43.849	9.257	1.00	61.38
ATOM	268	NH1	ARG	189	78.057	43.832	8.388	1.00	62.54
ATOM	269	NH2	ARG	189	77.225	43.328	10.465	1.00	62.20
ATOM	270	C	ARG	189	73.747	48.907	8.082	1.00	60.91
ATOM	271	O	ARG	189	74.548	49.245	7.207	1.00	60.67
ATOM	272	N	LYS	190	73.575	49.591	9.207	1.00	59.06
ATOM	273	CA	LYS	190	74.340	50.790	9.521	1.00	55.00
ATOM	274	CB	LYS	190	73.423	52.008	9.582	1.00	55.45
ATOM	275	C	LYS	190	74.991	50.542	10.875	1.00	51.52
ATOM	276	O	LYS	190	74.320	50.144	11.830	1.00	51.68
ATOM	277	N	PHE	191	76.304	50.721	10.944	1.00	50.49
ATOM	278	CA	PHE	191	77.037	50.508	12.186	1.00	50.17
ATOM	279	CB	PHE	191	78.546	50.571	11.943	1.00	48.38
ATOM	280	CG	PHE	191	79.090	49.423	11.142	1.00	49.66
ATOM	281	CD1	PHE	191	78.873	49.348	9.768	1.00	51.03
ATOM	282	CD2	PHE	191	79.845	48.429	11.759	1.00	46.28
ATOM	283	CE1	PHE	191	79.403	48.298	9.018	1.00	51.35
ATOM	284	CE2	PHE	191	80.379	47.377	11.021	1.00	47.26
ATOM	285	CZ	PHE	191	80.158	47.311	9.646	1.00	48.48
ATOM	286	C	PHE	191	76.663	51.534	13.248	1.00	48.61

ATOM	287	O	PHE	191	76.507	52.720	12.952	1.00	50.38
ATOM	288	N	LEU	192	76.488	51.068	14.479	1.00	47.31
ATOM	289	CA	LEU	192	76.169	51.958	15.584	1.00	42.72
ATOM	290	CB	LEU	192	75.845	51.151	16.844	1.00	36.66
ATOM	291	CG	LEU	192	75.397	51.949	18.068	1.00	31.01
ATOM	292	CD1	LEU	192	74.048	52.590	17.786	1.00	28.37
ATOM	293	CD2	LEU	192	75.318	51.043	19.289	1.00	29.60
ATOM	294	C	LEU	192	77.447	52.760	15.800	1.00	42.28
ATOM	295	O	LEU	192	78.528	52.179	15.932	1.00	39.71
ATOM	296	N	PRO	193	77.350	54.104	15.781	1.00	45.15
ATOM	297	CD	PRO	193	76.095	54.865	15.617	1.00	43.82
ATOM	298	CA	PRO	193	78.493	55.006	15.973	1.00	43.14
ATOM	299	CB	PRO	193	77.820	56.306	16.400	1.00	44.37
ATOM	300	CG	PRO	193	76.571	56.308	15.565	1.00	41.66
ATOM	301	C	PRO	193	79.476	54.498	17.028	1.00	43.34
ATOM	302	O	PRO	193	79.103	54.296	18.182	1.00	45.18
ATOM	303	N	ASP	194	80.732	54.317	16.628	1.00	44.22
ATOM	304	CA	ASP	194	81.781	53.804	17.512	1.00	47.20
ATOM	305	CB	ASP	194	83.108	53.732	16.761	1.00	41.89
ATOM	306	C	ASP	194	81.962	54.511	18.866	1.00	51.99
ATOM	307	O	ASP	194	82.636	53.986	19.752	1.00	54.04
ATOM	308	N	ASP	195	81.381	55.698	19.025	1.00	55.21
ATOM	309	CA	ASP	195	81.489	56.428	20.288	1.00	57.50
ATOM	310	CB	ASP	195	81.423	57.948	20.061	1.00	60.04
ATOM	311	CG	ASP	195	80.123	58.398	19.406	1.00	68.39
ATOM	312	OD1	ASP	195	79.211	58.847	20.136	1.00	69.46
ATOM	313	OD2	ASP	195	80.020	58.322	18.162	1.00	72.91
ATOM	314	C	ASP	195	80.410	55.976	21.280	1.00	58.05
ATOM	315	O	ASP	195	80.540	56.180	22.491	1.00	58.97
ATOM	316	N	ILE	196	79.349	55.363	20.759	1.00	56.06
ATOM	317	CA	ILE	196	78.247	54.863	21.580	1.00	50.48
ATOM	318	CB	ILE	196	76.930	54.762	20.766	1.00	45.82
ATOM	319	CG2	ILE	196	75.818	54.166	21.621	1.00	44.04
ATOM	320	CG1	ILE	196	76.517	56.147	20.261	1.00	44.27
ATOM	321	CD1	ILE	196	75.179	56.171	19.541	1.00	45.25
ATOM	322	C	ILE	196	78.603	53.484	22.135	1.00	47.66
ATOM	323	O	ILE	196	79.138	52.636	21.419	1.00	43.96
ATOM	324	N	GLY	197	78.309	53.269	23.414	1.00	46.29
ATOM	325	CA	GLY	197	78.608	51.995	24.045	1.00	48.03
ATOM	326	C	GLY	197	79.978	51.963	24.692	1.00	50.42
ATOM	327	O	GLY	197	80.463	50.902	25.070	1.00	46.66
ATOM	328	N	GLN	198	80.583	53.137	24.854	1.00	56.94
ATOM	329	CA	GLN	198	81.910	53.259	25.454	1.00	59.51
ATOM	330	CB	GLN	198	82.751	54.257	24.649	1.00	62.53
ATOM	331	CG	GLN	198	83.232	53.718	23.316	1.00	69.39
ATOM	332	CD	GLN	198	84.088	52.484	23.483	1.00	76.76
ATOM	333	OE1	GLN	198	83.745	51.399	22.996	1.00	81.73

ATOM	334	NE2	GLN	198	85.205	52.632	24.192	1.00	78.09
ATOM	335	C	GLN	198	81.915	53.678	26.922	1.00	57.56
ATOM	336	O	GLN	198	82.946	53.584	27.588	1.00	57.71
ATOM	337	N	SER	199	80.770	54.128	27.425	1.00	54.11
ATOM	338	CA	SER	199	80.676	54.600	28.800	1.00	46.28
ATOM	339	CB	SER	199	80.243	56.067	28.777	1.00	50.28
ATOM	340	OG	SER	199	80.935	56.776	27.757	1.00	50.95
ATOM	341	C	SER	199	79.776	53.805	29.757	1.00	40.19
ATOM	342	O	SER	199	78.680	54.252	30.102	1.00	39.26
ATOM	343	N	PRO	200	80.236	52.629	30.214	1.00	35.63
ATOM	344	CD	PRO	200	81.530	52.011	29.904	1.00	34.88
ATOM	345	CA	PRO	200	79.464	51.789	31.139	1.00	37.54
ATOM	346	CB	PRO	200	80.223	50.457	31.124	1.00	29.86
ATOM	347	CG	PRO	200	81.207	50.570	29.995	1.00	34.29
ATOM	348	C	PRO	200	79.521	52.416	32.532	1.00	44.63
ATOM	349	O	PRO	200	80.443	52.137	33.300	1.00	47.80
ATOM	350	N	ILE	201	78.532	53.241	32.867	1.00	49.57
ATOM	351	CA	ILE	201	78.525	53.924	34.158	1.00	49.15
ATOM	352	CB	ILE	201	78.213	55.426	33.990	1.00	49.19
ATOM	353	CG2	ILE	201	78.429	56.150	35.306	1.00	53.37
ATOM	354	CG1	ILE	201	79.137	56.037	32.934	1.00	52.55
ATOM	355	CD1	ILE	201	78.811	57.471	32.586	1.00	55.26
ATOM	356	C	ILE	201	77.625	53.352	35.254	1.00	49.88
ATOM	357	O	ILE	201	78.044	53.250	36.408	1.00	50.20
ATOM	358	N	VAL	202	76.384	53.014	34.920	1.00	47.85
ATOM	359	CA	VAL	202	75.468	52.474	35.927	1.00	45.76
ATOM	360	CB	VAL	202	74.015	52.415	35.400	1.00	39.98
ATOM	361	CG1	VAL	202	73.072	51.896	36.482	1.00	35.94
ATOM	362	CG2	VAL	202	73.574	53.799	34.944	1.00	29.43
ATOM	363	C	VAL	202	75.954	51.093	36.373	1.00	50.57
ATOM	364	O	VAL	202	76.296	50.249	35.545	1.00	49.50
ATOM	365	N	SER	203	76.009	50.876	37.683	1.00	54.82
ATOM	366	CA	SER	203	76.490	49.609	38.223	1.00	59.26
ATOM	367	CB	SER	203	77.067	49.809	39.628	1.00	64.88
ATOM	368	OG	SER	203	76.127	50.428	40.492	1.00	75.47
ATOM	369	C	SER	203	75.457	48.491	38.244	1.00	55.78
ATOM	370	O	SER	203	74.285	48.712	38.544	1.00	57.50
ATOM	371	N	MET	204	75.923	47.283	37.958	1.00	52.29
ATOM	372	CA	MET	204	75.076	46.103	37.948	1.00	50.42
ATOM	373	CB	MET	204	75.032	45.487	36.548	1.00	47.74
ATOM	374	CG	MET	204	74.243	46.297	35.541	1.00	43.40
ATOM	375	SD	MET	204	72.491	46.348	35.953	1.00	40.93
ATOM	376	CE	MET	204	71.947	44.785	35.241	1.00	39.19
ATOM	377	C	MET	204	75.670	45.107	38.925	1.00	49.42
ATOM	378	O	MET	204	76.892	45.020	39.062	1.00	52.25
ATOM	379	N	PRO	205	74.816	44.329	39.605	1.00	47.73
ATOM	380	CD	PRO	205	73.344	44.414	39.549	1.00	48.94

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ATOM    381  CA  PRO  205    75.250  43.326  40.580  1.00 47.34
ATOM    382  CB  PRO  205    73.982  42.513  40.810  1.00 49.44
ATOM    383  CG  PRO  205    72.907  43.562  40.725  1.00 50.62
ATOM    384  C   PRO  205    76.431  42.442  40.168  1.00 47.12
ATOM    385  O   PRO  205    77.299  42.160  40.990  1.00 51.21
ATOM    386  N⁻  ASP  206    76.487  42.023  38.909  1.00 48.81
ATOM    387  CA  ASP  206    77.583  41.160  38.465  1.00 49.88
ATOM    388  CB  ASP  206    77.128  40.223  37.330  1.00 54.06
ATOM    389  CG  ASP  206    76.598  40.967  36.107  1.00 57.34
ATOM    390  OD1 ASP  206    77.056  42.095  35.811  1.00 52.21
ATOM    391  OD2 ASP  206    75.719  40.397  35.423  1.00 59.16
ATOM    392  C   ASP  206    78.902  41.843  38.093  1.00 48.70
ATOM    393  O   ASP  206    79.862  41.171  37.715  1.00 49.75
ATOM    394  N   GLY  207    78.946  43.168  38.161  1.00 47.54
ATOM    395  CA  GLY  207    80.174  43.869  37.820  1.00 49.23
ATOM    396  C   GLY  207    80.169  44.585  36.482  1.00 51.96
ATOM    397  O   GLY  207    80.783  45.645  36.348  1.00 56.32
ATOM    398  N   ASP  208    79.510  44.005  35.481  1.00 52.50
ATOM    399  CA  ASP  208    79.435  44.624  34.157  1.00 48.00
ATOM    400  CB  ASP  208    78.968  43.609  33.115  1.00 53.23
ATOM    401  CG  ASP  208    80.038  42.592  32.774  1.00 53.17
ATOM    402  OD1 ASP  208    81.130  43.006  32.335  1.00 57.42
ATOM    403  OD2 ASP  208    79.787  41.380  32.942  1.00 55.64
ATOM    404  C   ASP  208    78.497  45.823  34.187  1.00 46.68
ATOM    405  O   ASP  208    77.283  45.671  34.332  1.00 45.81
ATOM    406  N   LYS  209    79.075  47.014  34.077  1.00 45.95
ATOM    407  CA  LYS  209    78.313  48.257  34.115  1.00 45.87
ATOM    408  CB  LYS  209    79.235  49.418  34.478  1.00 46.90
ATOM    409  C   LYS  209    77.561  48.546  32.812  1.00 41.17
ATOM    410  O   LYS  209    77.951  48.074  31.745  1.00 39.51
ATOM    411  N   VAL  210    76.500  49.344  32.916  1.00 39.35
ATOM    412  CA  VAL  210    75.652  49.713  31.782  1.00 38.03
ATOM    413  CB  VAL  210    74.136  49.584  32.140  1.00 32.13
ATOM    414  CG1 VAL  210    73.269  49.926  30.937  1.00 27.92
ATOM    415  CG2 VAL  210    73.818  48.183  32.627  1.00 29.43
ATOM    416  C   VAL  210    75.895  51.134  31.263  1.00 38.68
ATOM    417  O   VAL  210    76.090  52.079  32.038  1.00 39.57
ATOM    418  N   ASP  211    75.848  51.272  29.942  1.00 39.19
ATOM    419  CA  ASP  211    76.019  52.544  29.254  1.00 38.39
ATOM    420  CB  ASP  211    76.794  52.327  27.946  1.00 40.36
ATOM    421  CG  ASP  211    77.051  53.620  27.177  1.00 36.85
ATOM    422  OD1 ASP  211    76.193  54.528  27.167  1.00 37.95
ATOM    423  OD2 ASP  211    78.121  53.716  26.553  1.00 33.87
ATOM    424  C   ASP  211    74.601  53.040  28.958  1.00 40.60
ATOM    425  O   ASP  211    73.919  52.517  28.073  1.00 40.36
ATOM    426  N   LEU  212    74.185  54.074  29.680  1.00 41.55
ATOM    427  CA  LEU  212    72.854  54.664  29.552  1.00 38.39
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ATOM   428  CB  LEU  212    72.759  55.883  30.467  1.00 40.93
ATOM   429  CG  LEU  212    71.575  55.979  31.428  1.00 45.32
ATOM   430  CD1 LEU  212    71.271  54.626  32.047  1.00 43.83
ATOM   431  CD2 LEU  212    71.900  57.007  32.502  1.00 44.93
ATOM   432  C   LEU  212    72.448  55.050  28.133  1.00 37.61
ATOM   433  O⁻  LEU  212    71.318  54.805  27.719  1.00 33.71
ATOM   434  N   GLU  213    73.360  55.670  27.393  1.00 41.23
ATOM   435  CA  GLU  213    73.068  56.084  26.023  1.00 43.48
ATOM   436  CB  GLU  213    74.181  56.986  25.481  1.00 47.66
ATOM   437  CG  GLU  213    73.919  57.494  24.065  1.00 56.87
ATOM   438  CD  GLU  213    75.121  58.180  23.433  1.00 60.87
ATOM   439  OE1 GLU  213    76.258  57.996  23.924  1.00 60.37
ATOM   440  OE2 GLU  213    74.921  58.894  22.423  1.00 61.13
ATOM   441  C   GLU  213    72.889  54.880  25.102  1.00 39.29
ATOM   442  O   GLU  213    71.965  54.841  24.290  1.00 36.66
ATOM   443  N   ALA  214    73.785  53.906  25.233  1.00 36.33
ATOM   444  CA  ALA  214    73.739  52.693  24.422  1.00 34.89
ATOM   445  CB  ALA  214    74.946  51.817  24.711  1.00 30.70
ATOM   446  C   ALA  214    72.454  51.938  24.718  1.00 31.96
ATOM   447  O   ALA  214    71.739  51.523  23.804  1.00 33.93
ATOM   448  N   PHE  215    72.151  51.798  26.003  1.00 28.47
ATOM   449  CA  PHE  215    70.947  51.116  26.445  1.00 29.74
ATOM   450  CB  PHE  215    70.819  51.223  27.962  1.00 23.73
ATOM   451  CG  PHE  215    69.589  50.568  28.515  1.00 22.71
ATOM   452  CD1 PHE  215    69.603  49.220  28.858  1.00 22.53
ATOM   453  CD2 PHE  215    68.423  51.301  28.712  1.00 19.74
ATOM   454  CE1 PHE  215    68.477  48.606  29.391  1.00 20.75
ATOM   455  CE2 PHE  215    67.290  50.698  29.245  1.00 21.02
ATOM   456  CZ  PHE  215    67.318  49.346  29.586  1.00 19.50
ATOM   457  C   PHE  215    69.730  51.742  25.771  1.00 34.64
ATOM   458  O   PHE  215    68.872  51.034  25.239  1.00 39.86
ATOM   459  N   SER  216    69.677  53.071  25.771  1.00 34.78
ATOM   460  CA  SER  216    68.572  53.801  25.160  1.00 36.01
ATOM   461  CB  SER  216    68.762  55.302  25.366  1.00 37.36
ATOM   462  OG  SER  216    67.537  55.987  25.193  1.00 48.33
ATOM   463  C   SER  216    68.458  53.475  23.664  1.00 37.06
ATOM   464  O   SER  216    67.358  53.250  23.148  1.00 33.23
ATOM   465  N   GLU  217    69.601  53.410  22.986  1.00 36.25
ATOM   466  CA  GLU  217    69.645  53.091  21.562  1.00 36.99
ATOM   467  CB  GLU  217    71.092  53.104  21.064  1.00 37.10
ATOM   468  CG  GLU  217    71.682  54.491  20.912  1.00 44.30
ATOM   469  CD  GLU  217    71.016  55.284  19.802  1.00 51.30
ATOM   470  OE1 GLU  217    71.439  55.142  18.633  1.00 57.25
ATOM   471  OE2 GLU  217    70.070  56.046  20.096  1.00 52.50
ATOM   472  C   GLU  217    69.019  51.726  21.286  1.00 36.93
ATOM   473  O   GLU  217    68.191  51.577  20.381  1.00 41.06
ATOM   474  N   PHE  218    69.395  50.740  22.093  1.00 30.27
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ATOM    475  CA  PHE    218    68.875  49.388  21.947  1.00 27.20
ATOM    476  CB  PHE    218    69.679  48.421  22.814  1.00 28.10
ATOM    477  CG  PHE    218    71.124  48.330  22.428  1.00 24.84
ATOM    478  CD1 PHE    218    72.117  48.286  23.398  1.00 21.78
ATOM    479  CD2 PHE    218    71.495  48.301  21.087  1.00 24.78
ATOM    480  CE1 PHE    218    73.458  48.215  23.040  1.00 24.08
ATOM    481  CE2 PHE    218    72.834  48.230  20.719  1.00 25.33
ATOM    482  CZ  PHE    218    73.818  48.187  21.697  1.00 25.04
ATOM    483  C   PHE    218    67.381  49.281  22.261  1.00 28.23
ATOM    484  O   PHE    218    66.639  48.605  21.543  1.00 33.52
ATOM    485  N   THR    219    66.927  49.961  23.310  1.00 27.24
ATOM    486  CA  THR    219    65.515  49.913  23.666  1.00 29.28
ATOM    487  CB  THR    219    65.238  50.533  25.052  1.00 30.97
ATOM    488  OG1 THR    219    65.724  51.880  25.090  1.00 35.50
ATOM    489  CG2 THR    219    65.901  49.712  26.149  1.00 30.78
ATOM    490  C   THR    219    64.660  50.612  22.615  1.00 33.29
ATOM    491  O   THR    219    63.473  50.317  22.474  1.00 36.85
ATOM    492  N   LYS    220    65.276  51.515  21.860  1.00 35.23
ATOM    493  CA  LYS    220    64.579  52.253  20.816  1.00 38.97
ATOM    494  CB  LYS    220    65.506  53.334  20.236  1.00 44.67
ATOM    495  CG  LYS    220    64.805  54.491  19.513  1.00 58.02
ATOM    496  CD  LYS    220    64.406  54.130  18.079  1.00 68.57
ATOM    497  CE  LYS    220    63.732  55.296  17.347  1.00 70.50
ATOM    498  NZ  LYS    220    62.395  55.668  17.905  1.00 66.08
ATOM    499  C   LYS    220    64.112  51.289  19.721  1.00 38.48
ATOM    500  O   LYS    220    63.021  51.446  19.173  1.00 37.18
ATOM    501  N   ILE    221    64.917  50.270  19.432  1.00 36.19
ATOM    502  CA  ILE    221    64.563  49.305  18.394  1.00 36.77
ATOM    503  CB  ILE    221    65.756  48.996  17.457  1.00 34.41
ATOM    504  CG2 ILE    221    66.270  50.276  16.814  1.00 38.54
ATOM    505  CG1 ILE    221    66.864  48.267  18.221  1.00 32.93
ATOM    506  CD1 ILE    221    67.984  47.752  17.338  1.00 31.12
ATOM    507  C   ILE    221    64.002  47.971  18.888  1.00 38.22
ATOM    508  O   ILE    221    63.499  47.181  18.089  1.00 38.90
ATOM    509  N   ILE    222    64.048  47.719  20.191  1.00 35.75
ATOM    510  CA  ILE    222    63.557  46.446  20.702  1.00 31.77
ATOM    511  CB  ILE    222    64.086  46.152  22.130  1.00 33.14
ATOM    512  CG2 ILE    222    63.203  46.813  23.183  1.00 24.60
ATOM    513  CG1 ILE    222    64.147  44.638  22.350  1.00 32.60
ATOM    514  CD1 ILE    222    64.860  44.226  23.609  1.00 34.52
ATOM    515  C   ILE    222    62.042  46.240  20.624  1.00 32.56
ATOM    516  O   ILE    222    61.581  45.109  20.452  1.00 35.74
ATOM    517  N   THR    223    61.262  47.313  20.720  1.00 29.43
ATOM    518  CA  THR    223    59.806  47.170  20.651  1.00 33.57
ATOM    519  CB  THR    223    59.075  48.514  20.903  1.00 38.99
ATOM    520  OG1 THR    223    59.422  49.010  22.205  1.00 41.23
ATOM    521  CG2 THR    223    57.558  48.325  20.836  1.00 36.98
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ATOM	522	C	THR	223	59.355	46.528	19.325	1.00	31.45
ATOM	523	O	THR	223	58.571	45.571	19.334	1.00	26.77
ATOM	524	N	PRO	224	59.824	47.054	18.173	1.00	31.35
ATOM	525	CD	PRO	224	60.570	48.306	17.950	1.00	30.11
ATOM	526	CA	PRO	224	59.424	46.462	16.891	1.00	30.38
ATOM	527	CB	PRO	224	60.149	47.336	15.865	1.00	30.09
ATOM	528	CG	PRO	224	60.200	48.659	16.530	1.00	31.86
ATOM	529	C	PRO	224	59.882	45.007	16.795	1.00	29.51
ATOM	530	O	PRO	224	59.147	44.153	16.295	1.00	32.52
ATOM	531	N	ALA	225	61.090	44.734	17.285	1.00	22.63
ATOM	532	CA	ALA	225	61.650	43.385	17.268	1.00	20.88
ATOM	533	CB	ALA	225	63.046	43.386	17.862	1.00	20.57
ATOM	534	C	ALA	225	60.752	42.416	18.026	1.00	23.53
ATOM	535	O	ALA	225	60.455	41.323	17.544	1.00	25.07
ATOM	536	N	ILE	226	60.296	42.828	19.202	1.00	22.61
ATOM	537	CA	ILE	226	59.420	41.989	20.007	1.00	19.46
ATOM	538	CB	ILE	226	59.120	42.644	21.360	1.00	20.25
ATOM	539	CG2	ILE	226	58.071	41.843	22.105	1.00	16.75
ATOM	540	CG1	ILE	226	60.401	42.772	22.182	1.00	19.30
ATOM	541	CD1	ILE	226	60.240	43.645	23.413	1.00	20.92
ATOM	542	C	ILE	226	58.112	41.768	19.251	1.00	21.28
ATOM	543	O	ILE	226	57.553	40.670	19.256	1.00	23.75
ATOM	544	N	THR	227	57.629	42.821	18.598	1.00	24.46
ATOM	545	CA	THR	227	56.393	42.752	17.826	1.00	25.81
ATOM	546	CB	THR	227	56.020	44.136	17.260	1.00	31.00
ATOM	547	OG1	THR	227	55.772	45.039	18.345	1.00	35.43
ATOM	548	CG2	THR	227	54.776	44.049	16.388	1.00	29.01
ATOM	549	C	THR	227	56.508	41.728	16.691	1.00	22.85
ATOM	550	O	THR	227	55.589	40.939	16.469	1.00	22.84
ATOM	551	N	ARG	228	57.647	41.713	16.004	1.00	16.09
ATOM	552	CA	ARG	228	57.862	40.765	14.919	1.00	16.97
ATOM	553	CB	ARG	228	59.161	41.064	14.174	1.00	14.71
ATOM	554	CG	ARG	228	59.137	42.369	13.391	1.00	16.22
ATOM	555	CD	ARG	228	60.309	42.447	12.422	1.00	20.90
ATOM	556	NE	ARG	228	61.595	42.207	13.078	1.00	24.94
ATOM	557	CZ	ARG	228	62.243	43.113	13.805	1.00	35.06
ATOM	558	NH1	ARG	228	61.729	44.328	13.973	1.00	36.35
ATOM	559	NH2	ARG	228	63.404	42.807	14.370	1.00	32.78
ATOM	560	C	ARG	228	57.866	39.326	15.431	1.00	21.63
ATOM	561	O	ARG	228	57.477	38.407	14.704	1.00	24.47
ATOM	562	N	VAL	229	58.304	39.128	16.675	1.00	20.00
ATOM	563	CA	VAL	229	58.319	37.793	17.266	1.00	18.39
ATOM	564	CB	VAL	229	59.103	37.745	18.606	1.00	19.20
ATOM	565	CG1	VAL	229	58.938	36.382	19.265	1.00	14.19
ATOM	566	CG2	VAL	229	60.581	38.001	18.356	1.00	14.81
ATOM	567	C	VAL	229	56.875	37.367	17.501	1.00	20.00
ATOM	568	O	VAL	229	56.499	36.227	17.212	1.00	20.04

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ATOM    569  N   VAL   230      56.058  38.291  18.003  1.00 19.60
ATOM    570  CA  VAL   230      54.651  37.996  18.247  1.00 18.72
ATOM    571  CB  VAL   230      53.930  39.185  18.912  1.00 22.15
ATOM    572  CG1 VAL   230      52.452  38.862  19.113  1.00 15.66
ATOM    573  CG2 VAL   230      54.592  39.522  20.248  1.00 21.05
ATOM    574  C⁻  VAL   230      53.967  37.660  16.917  1.00 26.17
ATOM    575  O   VAL   230      53.188  36.704  16.836  1.00 28.01
ATOM    576  N   ASP   231      54.288  38.426  15.873  1.00 25.07
ATOM    577  CA  ASP   231      53.714  38.216  14.542  1.00 26.10
ATOM    578  CB  ASP   231      54.169  39.309  13.568  1.00 22.15
ATOM    579  CG  ASP   231      53.620  40.684  13.921  1.00 29.49
ATOM    580  OD1 ASP   231      52.587  40.767  14.624  1.00 30.93
ATOM    581  OD2 ASP   231      54.223  41.687  13.481  1.00 31.74
ATOM    582  C   ASP   231      54.087  36.842  13.989  1.00 27.35
ATOM    583  O   ASP   231      53.245  36.154  13.408  1.00 25.89
ATOM    584  N   PHE   232      55.347  36.451  14.175  1.00 24.29
ATOM    585  CA  PHE   232      55.825  35.154  13.714  1.00 22.90
ATOM    586  CB  PHE   232      57.302  34.956  14.090  1.00 20.56
ATOM    587  CG  PHE   232      57.762  33.525  14.007  1.00 24.20
ATOM    588  CD1 PHE   232      57.952  32.910  12.772  1.00 23.44
ATOM    589  CD2 PHE   232      57.959  32.776  15.167  1.00 19.41
ATOM    590  CE1 PHE   232      58.329  31.567  12.689  1.00 19.53
ATOM    591  CE2 PHE   232      58.336  31.431  15.100  1.00 21.09
ATOM    592  CZ  PHE   232      58.520  30.824  13.858  1.00 21.61
ATOM    593  C   PHE   232      54.984  34.047  14.341  1.00 24.18
ATOM    594  O   PHE   232      54.481  33.160  13.645  1.00 22.26
ATOM    595  N   ALA   233      54.810  34.127  15.656  1.00 23.90
ATOM    596  CA  ALA   233      54.048  33.128  16.397  1.00 22.60
ATOM    597  CB  ALA   233      54.088  33.435  17.890  1.00 15.34
ATOM    598  C   ALA   233      52.609  33.040  15.917  1.00 22.04
ATOM    599  O   ALA   233      52.084  31.948  15.697  1.00 22.86
ATOM    600  N   LYS   234      51.978  34.195  15.743  1.00 25.04
ATOM    601  CA  LYS   234      50.593  34.248  15.298  1.00 27.68
ATOM    602  CB  LYS   234      50.096  35.691  15.292  1.00 31.41
ATOM    603  CG  LYS   234      49.845  36.248  16.682  1.00 40.37
ATOM    604  CD  LYS   234      49.212  37.626  16.604  1.00 57.53
ATOM    605  CE  LYS   234      48.772  38.112  17.974  1.00 64.28
ATOM    606  NZ  LYS   234      48.164  39.473  17.904  1.00 67.19
ATOM    607  C   LYS   234      50.358  33.588  13.939  1.00 26.42
ATOM    608  O   LYS   234      49.269  33.067  13.674  1.00 31.34
ATOM    609  N   LYS   235      51.382  33.588  13.093  1.00 24.38
ATOM    610  CA  LYS   235      51.278  32.985  11.770  1.00 26.42
ATOM    611  CB  LYS   235      52.244  33.664  10.805  1.00 24.92
ATOM    612  CG  LYS   235      51.908  35.127  10.583  1.00 22.41
ATOM    613  CD  LYS   235      52.843  35.775   9.588  1.00 29.38
ATOM    614  CE  LYS   235      52.481  37.234   9.395  1.00 33.49
ATOM    615  NZ  LYS   235      53.354  37.869   8.376  1.00 40.13
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ATOM   616 C   LYS   235   51.470 31.469 11.759 1.00 30.02
ATOM   617 O   LYS   235   51.417 30.838 10.699 1.00 30.37
ATOM   618 N   LEU   236   51.722 30.889 12.930 1.00 32.39
ATOM   619 CA  LEU   236   51.878 29.443 13.053 1.00 36.24
ATOM   620 CB  LEU . 236   52.944 29.080 14.089 1.00 29.91
ATOM   621 CG  LEU   236   54.373 29.516 13.765 1.00 24.69
ATOM   622 CD1 LEU   236   55.299 29.054 14.877 1.00 22.71
ATOM   623 CD2 LEU   236   54.811 28.942 12.427 1.00 24.48
ATOM   624 C   LEU   236   50.520 28.891 13.470 1.00 41.22
ATOM   625 O   LEU   236   49.936 29.333 14.467 1.00 41.45
ATOM   626 N   PRO . 237   50.012 27.895 12.729 1.00 47.86
ATOM   627 CD  PRO   237  .50.739 27.190 11.657 1.00 49.32
ATOM   628 CA  PRO   237   48.713 27.262 12.992 1.00 50.28
ATOM   629 CB  PRO   237   48.669 26.128 11.962 1.00 55.25
ATOM   630 CG  PRO   237   50.135 25.818 11.706 1.00 54.08
ATOM   631 C   PRO   237   48.495 26.751 14.422 1.00 47.94
ATOM   632 O   PRO   237   47.533 27.134 15.087 1.00 42.48
ATOM   633 N   MET   238   49.415 25.927 14.906 1.00 49.51
ATOM   634 CA  MET   238   49.306 25.354 16.245 1.00 53.49
ATOM   635 CB  MET   238   50.379 24.275 16.424 1.00 52.52
ATOM   636 CG  MET   238   50.028 22.959 15.728 1.00 56.00
ATOM   637 SD  MET   238   51.443 21.961 15.204 1.00 50.16
ATOM   638 CE  MET   238   50.896 21.440 13.552 1.00 55.71
ATOM   639 C   MET   238   49.352 26.362 17.395 1.00 54.20
ATOM   640 O   MET   238   48.930 26.058 18.515 1.00 54.72
ATOM   641 N   PHE   239   49.803 27.578 17.101 1.00 50.11
ATOM   642 CA  PHE   239   49.917 28.619 18.117 1.00 41.11
ATOM   643 CB  PHE   239   51.089 29.552 17.788 1.00 34.80
ATOM   644 CG  PHE   239   51.336 30.607 18.826 1.00 30.25
ATOM   645 CD1 PHE   239   52.127 30.332 19.937 1.00 25.66
ATOM   646 CD2 PHE   239   50.786 31.878 18.690 1.00 26.30
ATOM   647 CE1 PHE   239   52.368 31.307 20.896 1.00 30.28
ATOM   648 CE2 PHE   239   51.019 32.862 19.644 1.00 30.49
ATOM   649 CZ  PHE   239   51.813 32.576 20.750 1.00 29.00
ATOM   650 C   PHE   239   48.647 29.434 18.337 1.00 35.65
ATOM   651 O   PHE   239   48.151 29.521 19.457 1.00 30.27
ATOM   652 N   SER   240   48.133 30.037 17.272 1.00 36.49
ATOM   653 CA  SER   240   46.936 30.866 17.359 1.00 36.37
ATOM   654 CB  SER   240   46.622 31.466 15.994 1.00 35.87
ATOM   655 C   SER   240   45.707 30.145 17.936 1.00 40.37
ATOM   656 O   SER   240   44.784 30.789 18.438 1.00 37.47
ATOM   657 N   GLU   241   45.713 28.814 17.889 1.00 43.00
ATOM   658 CA  GLU   241   44.605 28.004 18.404 1.00 46.31
ATOM   659 CB  GLU   241   44.714 26.566 17.881 1.00 55.84
ATOM   660 CG  GLU   241   44.750 26.422 16.360 1.00 69.03
ATOM   661 CD  GLU   241   45.141 25.015 15.900 1.00 74.99
ATOM   662 OE1 GLU . 241   45.835 24.299 16.658 1.00 77.81
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ATOM    663  OE2 GLU  241      44.765  24.629  14.770  1.00 70.58
ATOM    664  C   GLU  241      44.587  27.961  19.933  1.00 42.60
ATOM    665  O   GLU  241      43.541  27.740  20.545  1.00 43.23
ATOM    666  N   LEU  242      45.762  28.125  20.535  1.00 39.31
ATOM    667  CA  LEU  242      45.926  28.086  21.987  1.00 34.54
ATOM    668  CB  LEU  242      47.417  28.109  22.344  1.00 28.35
ATOM    669  CG  LEU  242      48.311  26.974  21.853  1.00 27.59
ATOM    670  CD1 LEU  242      49.750  27.307  22.180  1.00 20.72
ATOM    671  CD2 LEU  242      47.902  25.661  22.500  1.00 24.97
ATOM    672  C   LEU  242      45.242  29.240  22.711  1.00 32.23
ATOM    673  O   LEU  242      44.956  30.282  22.119  1.00 31.50
ATOM    674  N   PRO  243      44.954  29.060  24.010  1.00 34.39
ATOM    675  CD  PRO  243      45.118  27.843  24.827  1.00 31.68
ATOM    676  CA  PRO  243      44.309  30.134  24.773  1.00 34.39
ATOM    677  CB  PRO  243      44.092  29.498  26.154  1.00 32.34
ATOM    678  CG  PRO  243      44.081  28.026  25.892  1.00 33.80
ATOM    679  C   PRO  243      45.300  31.303  24.873  1.00 35.56
ATOM    680  O   PRO  243      46.517  31.082  24.897  1.00 34.99
ATOM    681  N   CYS  244      44.791  32.532  24.946  1.00 34.23
ATOM    682  CA  CYS  244      45.648  33.714  25.062  1.00 37.03
ATOM    683  CB  CYS  244      44.820  34.960  25.376  1.00 43.49
ATOM    684  SG  CYS  244      43.820  35.531  24.007  1.00 71.28
ATOM    685  C   CYS  244      46.716  33.555  26.135  1.00 34.99
ATOM    686  O   CYS  244      47.894  33.802  25.882  1.00 37.49
ATOM    687  N   GLU  245      46.305  33.125  27.326  1.00 33.03
ATOM    688  CA  GLU  245      47.249  32.944  28.424  1.00 35.72
ATOM    689  CB  GLU  245      46.559  32.469  29.716  1.00 37.85
ATOM    690  CG  GLU  245      45.294  31.633  29.549  1.00 46.81
ATOM    691  CD  GLU  245      44.029  32.478  29.480  1.00 44.81
ATOM    692  OE1 GLU  245      43.606  33.012  30.527  1.00 33.05
ATOM    693  OE2 GLU  245      43.454  32.599  28.377  1.00 48.22
ATOM    694  C   GLU  245      48.414  32.035  28.047  1.00 32.29
ATOM    695  O   GLU  245      49.558  32.319  28.399  1.00 35.92
ATOM    696  N   ASP  246      48.134  30.975  27.295  1.00 30.64
ATOM    697  CA  ASP  246      49.182  30.058  26.855  1.00 28.23
ATOM    698  CB  ASP  246      48.575  28.809  26.208  1.00 30.51
ATOM    699  CG  ASP  246      48.213  27.737  27.222  1.00 33.18
ATOM    700  OD1 ASP  246      48.265  28.006  28.439  1.00 31.26
ATOM    701  OD2 ASP  246      47.884  26.613  26.796  1.00 33.85
ATOM    702  C   ASP  246      50.104  30.757  25.860  1.00 30.10
ATOM    703  O   ASP  246      51.330  30.651  25.950  1.00 27.08
ATOM    704  N   GLN  247      49.500  31.477  24.918  1.00 30.39
ATOM    705  CA  GLN  247      50.249  32.208  23.901  1.00 29.08
ATOM    706  CB  GLN  247      49.295  32.949  22.964  1.00 27.34
ATOM    707  CG  GLN  247      48.390  32.034  22.147  1.00 28.95
ATOM    708  CD  GLN  247      47.531  32.796  21.153  1.00 30.74
ATOM    709  OE1 GLN  247      47.850  33.918  20.767  1.00 33.23
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ATOM    710  NE2 GLN   247      46.439  32.185  20.729  1.00 35.19
ATOM    711  C   GLN   247      51.190  33.196  24.575  1.00 27.51
ATOM    712  O   GLN   247      52.377  33.261  24.256  1.00 28.70
ATOM    713  N   ILE   248      50.661  33.921  25.552  1.00 27.81
ATOM    714  CA  ILE   248      51.431  34.908  26.295  1.00 29.41
ATOM    715  CB  ILE   248      50.525  35.662  27.303  1.00 28.96
ATOM    716  CG2 ILE   248      51.356  36.476  28.279  1.00 28.67
ATOM    717  CG1 ILE   248      49.555  36.571  26.543  1.00 28.83
ATOM    718  CD1 ILE   248      48.514  37.236  27.420  1.00 30.76
ATOM    719  C   ILE   248      52.618  34.259  27.006  1.00 28.39
ATOM    720  O   ILE   248      53.759  34.715  26.869  1.00 27.88
ATOM    721  N   ILE   249      52.356  33.177  27.732  1.00 26.07
ATOM    722  CA  ILE   249      53.413  32.474  28.454  1.00 27.37
ATOM    723  CB  ILE   249      52.839  31.294  29.281  1.00 30.32
ATOM    724  CG2 ILE   249      53.958  30.425  29.840  1.00 31.29
ATOM    725  CG1 ILE   249      51.987  31.831  30.429  1.00 30.31
ATOM    726  CD1 ILE   249      51.295  30.753  31.230  1.00 31.30
ATOM    727  C   ILE   249      54.510  31.974  27.509  1.00 28.63
ATOM    728  O   ILE   249      55.701  32.100  27.808  1.00 29.59
ATOM    729  N   LEU   250      54.110  31.442  26.357  1.00 29.03
ATOM    730  CA  LEU   250      55.068  30.934  25.380  1.00 22.44
ATOM    731  CB  LEU   250      54.351  30.166  24.266  1.00 24.30
ATOM    732  CG  LEU   250      53.665  28.866  24.687  1.00 23.20
ATOM    733  CD1 LEU   250      52.951  28.273  23.502  1.00 20.36
ATOM    734  CD2 LEU   250      54.685  27.880  25.238  1.00 19.45
ATOM    735  C   LEU   250      55.919  32.055  24.794  1.00 18.97
ATOM    736  O   LEU   250      57.133  31.903  24.648  1.00 18.37
ATOM    737  N   LEU   251      55.291  33.180  24.468  1.00 20.63
ATOM    738  CA  LEU   251      56.026  34.318  23.915  1.00 27.43
ATOM    739  CB  LEU   251      55.065  35.412  23.449  1.00 22.92
ATOM    740  CG  LEU   251      54.364  35.093  22.128  1.00 24.72
ATOM    741  CD1 LEU   251      53.342  36.167  21.821  1.00 32.13
ATOM    742  CD2 LEU   251      55.389  34.981  21.009  1.00 22.46
ATOM    743  C   LEU   251      57.026  34.875  24.930  1.00 27.23
ATOM    744  O   LEU   251      58.202  35.078  24.614  1.00 26.48
ATOM    745  N   LYS   252      56.561  35.094  26.156  1.00 27.34
ATOM    746  CA  LYS   252      57.425  35.598  27.215  1.00 28.95
ATOM    747  CB  LYS   252      56.649  35.715  28.527  1.00 32.89
ATOM    748  CG  LYS   252      55.570  36.783  28.530  1.00 35.06
ATOM    749  CD  LYS   252      55.084  37.028  29.943  1.00 42.82
ATOM    750  CE  LYS   252      54.124  38.191  30.003  1.00 53.05
ATOM    751  NZ  LYS   252      53.677  38.451  31.398  1.00 64.03
ATOM    752  C   LYS   252      58.605  34.647  27.405  1.00 27.66
ATOM    753  O   LYS   252      59.734  35.076  27.646  1.00 33.16
ATOM    754  N   GLY   253      58.344  33.357  27.243  1.00 24.50
ATOM    755  CA  GLY   253      59.386  32.364  27.402  1.00 22.33
ATOM    756  C   GLY   253      60.423  32.273  26.297  1.00 23.99
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ATOM   757 O   GLY  253    61.589 32.016 26.581 1.00 30.77
ATOM   758 N   CYS  254    60.041 32.526 25.049 1.00 22.66
ATOM   759 CA  CYS  254    60.986 32.405 23.934 1.00 20.75
ATOM   760 CB  CYS  254    60.386 31.494 22.868 1.00 24.86
ATOM   761 SG  CYS  254    58.996 32.276 22.014 1.00 25.55
ATOM   762 C·  CYS  254    61.399 33.702 23.242 1.00 23.79
ATOM   763 O   CYS  254    62.262 33.685 22.357 1.00 22.18
ATOM   764 N   CYS  255    60.788 34.814 23.625 1.00 19.49
ATOM   765 CA  CYS  255    61.084 36.085 22.981 1.00 21.08
ATOM   766 CB  CYS  255    60.336 37.220 23.669 1.00 18.21
ATOM   767 SG  CYS  255    60.264 38.713 22.677 1.00 22.96
ATOM   768 C   CYS  255    62.570 36.413 22.842 1.00 21.87
ATOM   769 O   CYS  255    63.050 36.641 21.729 1.00 22.23
ATOM   770 N   MET  256    63.310 36.397 23.947 1.00 20.82
ATOM   771 CA  MET  256    64.741 36.706 23.895 1.00 20.50
ATOM   772 CB  MET  256    65.322 36.801 25.312 1.00 22.50
ATOM   773 CG  MET  256    66.808 37.139 25.354 1.00 16.67
ATOM   774 SD  MET  256    67.205 38.732 24.605 1.00 24.46
ATOM   775 CE  MET  256    69.027 38.764 24.791 1.00 19.21
ATOM   776 C   MET  256    65.510 35.667 23.072 1.00 18.38
ATOM   777 O   MET  256    66.401 36.005 22.293 1.00 17.68
ATOM   778 N   GLU  257    65.149 34.404 23.248 1.00 20.33
ATOM   779 CA  GLU  257    65.779 33.308 22.526 1.00 21.08
ATOM   780 CB  GLU  257    65.148 31.982 22.943 1.00 22.28
ATOM   781 CG  GLU  257    .65.374 31.640 24.411 1.00 34.68
ATOM   782 CD  GLU  257    64.515 30.486 24.907 1.00 43.20
ATOM   783 OE1 GLU  257    63.823 29.836 24.091 1.00 42.14
ATOM   784 OE2 GLU  257    64.530 30.230 26.128 1.00 50.15
ATOM   785 C   GLU  257    65.650 33.503 21.018 1.00 19.26
ATOM   786 O   GLU  257    66.632 33.360 20.276 1.00 18.09
ATOM   787 N   ILE  258    64.446 33.850 20.566 1.00 16.30
ATOM   788 CA  ILE  258    64.199 34.065 19.141 1.00 18.09
ATOM   789 CB  ILE  258    62.677 34.150 18.825 1.00 18.61
ATOM   790 CG2 ILE  258    62.441 34.653 17.395 1.00 16.23
ATOM   791 CG1 ILE  258    62.032 32.771 19.021 1.00 13.80
ATOM   792 CD1 ILE  258    60.544 32.714 18.695 1.00 13.21
ATOM   793 C   ILE  258    64.948 35.297 18.638 1.00 20.12
ATOM   794 O   ILE  258    65.605 35.242 17.593 1.00 19.17
ATOM   795 N   MET  259    64.903 36.387 19.404 1.00 22.71
ATOM   796 CA  MET  259    65.602 37.611 19.015 1.00 17.09
ATOM   797 CB  MET  259    65.249 38.772 19.941 1.00 18.80
ATOM   798 CG  MET  259    63.782 39.159 19.894 1.00 17.66
ATOM   799 SD  MET  259    63.457 40.748 20.678 1.00 25.77
ATOM   800 CE  MET  259    63.774 40.377 22.374 1.00 16.65
ATOM   801 C   MET  259    67.111 37.397 18.973 1.00 19.51
ATOM   802 O   MET  259    67.797 37.913 18.080 1.00 25.53
ATOM   803 N   SER  260    67.625 36.605 19.908 1.00 19.58
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ATOM	804	CA	SER	260	69.056	36.324	19.947	1.00	16.90
ATOM	805	CB	SER	260	69.434	35.631	21.251	1.00	15.56
ATOM	806	OG	SER	260	69.093	36.455	22.352	1.00	22.98
ATOM	807	C	SER	260	69.471	35.487	18.746	1.00	14.52
ATOM	808	O	SER	260	70.496	35.761	18.129	1.00	22.82
ATOM	809	N⁻	LEU	261	68.663	34.490	18.397	1.00	16.50
ATOM	810	CA	LEU	261	68.948	33.642	17.241	1.00	17.78
ATOM	811	CB	LEU	261	67.878	32.552	17.092	1.00	18.38
ATOM	812	CG	LEU	261	67.890	31.708	15.812	1.00	14.47
ATOM	813	CD1	LEU	261	69.159	30.877	15.728	1.00	16.76
ATOM	814	CD2	LEU	261	66.672	30.806	15.793	1.00	14.06
ATOM	815	C	LEU	261	68.959	34.519	15.992	1.00	20.40
ATOM	816	O	LEU	261	69.885	34.450	15.181	1.00	22.00
ATOM	817	N	ARG	262	67.934	35.356	15.854	1.00	21.02
ATOM	818	CA	ARG	262	67.821	36.249	14.705	1.00	22.84
ATOM	819	CB	ARG	262	66.530	37.067	14.782	1.00	20.29
ATOM	820	CG	ARG	262	65.311	36.267	14.364	1.00	23.33
ATOM	821	CD	ARG	262	64.007	37.026	14.509	1.00	19.05
ATOM	822	NE	ARG	262	62.959	36.321	13.775	1.00	21.32
ATOM	823	CZ	ARG	262	61.780	36.837	13.441	1.00	23.44
ATOM	824	NH1	ARG	262	61.465	38.081	13.780	1.00	22.99
ATOM	825	NH2	ARG	262	60.933	36.116	12.713	1.00	22.09
ATOM	826	C	ARG	262	69.035	37.154	14.561	1.00	22.66
ATOM	827	O	ARG	262	69.434	37.483	13.445	1.00	22.41
ATOM	828	N	ALA	263	69.625	37.545	15.689	1.00	23.52
ATOM	829	CA	ALA	263	70.820	38.386	15.677	1.00	22.37
ATOM	830	CB	ALA	263	70.986	39.089	17.018	1.00	22.76
ATOM	831	C	ALA	263	72.052	37.530	15.366	1.00	22.85
ATOM	832	O	ALA	263	72.882	37.897	14.529	1.00	25.50
ATOM	833	N	ALA	264	72.131	36.365	16.005	1.00	21.68
ATOM	834	CA	ALA	264	73.242	35.438	15.826	1.00	20.26
ATOM	835	CB	ALA	264	73.092	34.256	16.763	1.00	15.97
ATOM	836	C	ALA	264	73.401	34.957	14.382	1.00	23.11
ATOM	837	O	ALA	264	74.523	34.831	13.892	1.00	24.87
ATOM	838	N	VAL	265	72.293	34.679	13.697	1.00	22.94
ATOM	839	CA	VAL	265	72.380	34.226	12.306	1.00	28.98
ATOM	840	CB	VAL	265	71.072	33.547	11.797	1.00	25.97
ATOM	841	CG1	VAL	265	70.751	32.330	12.638	1.00	26.27
ATOM	842	CG2	VAL	265	69.907	34.527	11.797	1.00	26.64
ATOM	843	C	VAL	265	72.761	35.373	11.369	1.00	28.81
ATOM	844	O	VAL	265	72.966	35.160	10.176	1.00	31.92
ATOM	845	N	ARG	266	72.830	36.587	11.915	1.00	31.83
ATOM	846	CA	ARG	266	73.210	37.774	11.150	1.00	33.19
ATOM	847	CB	ARG	266	72.141	38.861	11.258	1.00	31.67
ATOM	848	CG	ARG	266	70.986	38.623	10.320	1.00	26.82
ATOM	849	CD	ARG	266	69.913	39.668	10.454	1.00	33.95
ATOM	850	NE	ARG	266	68.955	39.532	9.361	1.00	38.15

ATOM	851	CZ	ARG	266	67.688	39.927	9.410	1.00	37.39
ATOM	852	NH1	ARG	266	67.198	40.491	10.509	1.00	29.92
ATOM	853	NH2	ARG	266	66.918	39.770	8.340	1.00	31.24
ATOM	854	C	ARG	266	74.565	38.307	11.604	1.00	36.31
ATOM	855	O	ARG	266	74.821	39.516	11.575	1.00	38.56
ATOM	856	N	TYR	267	75.416	37.393	12.056	1.00	34.21
ATOM	857	CA	TYR	267	76.755	37.733	12.502	1.00	35.24
ATOM	858	CB	TYR	267	77.283	36.640	13.440	1.00	32.37
ATOM	859	CG	TYR	267	78.774	36.699	13.703	1.00	35.07
ATOM	860	CD1	TYR	267	79.303	37.555	14.669	1.00	33.94
ATOM	861	CE1	TYR	267	80.677	37.609	14.905	1.00	36.60
ATOM	862	CD2	TYR	267	79.658	35.894	12.979	1.00	34.68
ATOM	863	CE2	TYR	267	81.029	35.940	13.208	1.00	36.07
ATOM	864	CZ	TYR	267	81.533	36.797	14.170	1.00	37.14
ATOM	865	OH	TYR	267	82.889	36.835	14.396	1.00	41.52
ATOM	866	C	TYR	267	77.639	37.831	11.263	1.00	37.68
ATOM	867	O	TYR	267	77.609	36.943	10.410	1.00	36.48
ATOM	868	N	ASP	268	78.400	38.915	11.150	1.00	39.58
ATOM	869	CA	ASP	268	79.301	39.096	10.016	1.00	42.77
ATOM	870	CB	ASP	268	79.170	40.511	9.434	1.00	44.38
ATOM	871	CG	ASP	268	80.145	40.770	8.290	1.00	50.31
ATOM	872	OD1	ASP	268	80.290	39.901	7.400	1.00	55.79
ATOM	873	OD2	ASP	268	80.773	41.847	8.280	1.00	50.24
ATOM	874	C	ASP	268	80.737	38.846	10.466	1.00	42.51
ATOM	875	O	ASP	268	81.305	39.645	11.208	1.00	42.75
ATOM	876	N	PRO	269	81.346	37.733	10.020	1.00	44.56
ATOM	877	CD	PRO	269	80.770	36.697	9.146	1.00	42.66
ATOM	878	CA	PRO	269	82.725	37.395	10.393	1.00	45.98
ATOM	879	CB	PRO	269	82.991	36.111	9.607	1.00	44.04
ATOM	880	CG	PRO	269	81.631	35.506	9.458	1.00	43.33
ATOM	881	C	PRO	269	83.710	38.492	10.004	1.00	50.31
ATOM	882	O	PRO	269	84.630	38.800	10.761	1.00	49.83
ATOM	883	N	ALA	270	83.486	39.100	8.840	1.00	53.62
ATOM	884	CA	ALA	270	84.348	40.165	8.329	1.00	54.54
ATOM	885	CB	ALA	270	83.892	40.585	6.929	1.00	51.24
ATOM	886	C	ALA	270	84.449	41.389	9.248	1.00	55.69
ATOM	887	O	ALA	270	85.488	42.045	9.294	1.00	57.92
ATOM	888	N	SER	271	83.384	41.685	9.989	1.00	54.71
ATOM	889	CA	SER	271	83.378	42.838	10.889	1.00	51.26
ATOM	890	CB	SER	271	82.182	43.740	10.575	1.00	49.92
ATOM	891	OG	SER	271	82.065	43.976	9.183	1.00	60.09
ATOM	892	C	SER	271	83.305	42.443	12.360	1.00	50.78
ATOM	893	O	SER	271	83.482	43.288	13.240	1.00	52.11
ATOM	894	N	ASP	272	83.051	41.162	12.619	1.00	48.96
ATOM	895	CA	ASP	272	82.898	40.643	13.978	1.00	45.53
ATOM	896	CB	ASP	272	84.206	40.765	14.776	1.00	44.82
ATOM	897	CG	ASP	272	84.142	40.064	16.131	1.00	47.66

ATOM	898	OD1	ASP	272	84.750	40.581	17.091	1.00	48.64
ATOM	899	OD2	ASP	272	83.495	38.999	16.238	1.00	43.85
ATOM	900	C	ASP	272	81.765	41.437	14.636	1.00	44.46
ATOM	901	O	ASP	272	81.904	41.958	15.747	1.00	42.41
ATOM	902	N	THR	273	80.652	41.551	13.915	1.00	39.79
ATOM	903	CA	THR	273	79.492	42.282	14.401	1.00	38.82
ATOM	904	CB	THR	273	79.334	43.648	13.670	1.00	39.73
ATOM	905	OG1	THR	273	79.288	43.439	12.254	1.00	39.36
ATOM	906	CG2	THR	273	80.496	44.578	13.991	1.00	41.31
ATOM	907	C	THR	273	78.203	41.485	14.211	1.00	38.36
ATOM	908	O	THR	273	78.151	40.546	13.408	1.00	33.79
ATOM	909	N	LEU	274	77.187	41.835	14.995	1.00	36.91
ATOM	910	CA	LEU	274	75.869	41.212	14.912	1.00	34.49
ATOM	911	CB	LEU	274	75.342	40.822	16.297	1.00	30.37
ATOM	912	CG	LEU	274	75.948	39.651	17.069	1.00	32.97
ATOM	913	CD1	LEU	274	75.297	39.593	18.440	1.00	28.23
ATOM	914	CD2	LEU	274	75.749	38.341	16.318	1.00	26.86
ATOM	915	C	LEU	274	74.956	42.289	14.352	1.00	35.35
ATOM	916	O	LEU	274	75.171	43.478	14.601	1.00	37.47
ATOM	917	N	THR	275	73.942	41.890	13.599	1.00	34.05
ATOM	918	CA	THR	275	73.020	42.868	13.052	1.00	32.62
ATOM	919	CB	THR	275	72.824	42.674	11.542	1.00	35.14
ATOM	920	OG1	THR	275	74.108	42.590	10.909	1.00	39.50
ATOM	921	CG2	THR	275	72.064	43.851	10.952	1.00	30.94
ATOM	922	C	THR	275	71.699	42.746	13.793	1.00	30.92
ATOM	923	O	THR	275	71.100	41.670	13.845	1.00	36.53
ATOM	924	N	LEU	276	71.291	43.835	14.434	1.00	28.10
ATOM	925	CA	LEU	276	70.051	43.868	15.192	1.00	27.78
ATOM	926	CB	LEU	276	70.205	44.780	16.420	1.00	22.51
ATOM	927	CG	LEU	276	71.383	44.532	17.373	1.00	25.89
ATOM	928	CD1	LEU	276	71.225	45.408	18.608	1.00	20.70
ATOM	929	CD2	LEU	276	71.456	43.069	17.782	1.00	20.79
ATOM	930	C	LEU	276	68.930	44.376	14.296	1.00	27.27
ATOM	931	O	LEU	276	69.068	45.430	13.672	1.00	29.06
ATOM	932	N	SER	277	67.854	43.598	14.187	1.00	25.97
ATOM	933	CA	SER	277	66.697	43.957	13.366	1.00	28.63
ATOM	934	CB	SER	277	65.990	45.177	13.967	1.00	27.78
ATOM	935	OG	SER	277	65.561	44.905	15.290	1.00	22.65
ATOM	936	C	SER	277	67.067	44.209	11.897	1.00	30.31
ATOM	937	O	SER	277	66.374	44.939	11.181	1.00	28.52
ATOM	938	N	GLY	278	68.168	43.597	11.465	1.00	31.24
ATOM	939	CA	GLY	278	68.638	43.754	10.101	1.00	39.59
ATOM	940	C	GLY	278	68.999	45.178	9.706	1.00	44.55
ATOM	941	O	GLY	278	69.104	45.479	8.517	1.00	46.66
ATOM	942	N	GLU	279	69.234	46.046	10.686	1.00	43.47
ATOM	943	CA	GLU	279	69.566	47.435	10.387	1.00	43.87
ATOM	944	CB	GLU	279	68.314	48.312	10.515	1.00	44.28

ATOM	945	CG	GLU	279	67.703	48.322	11.908	1.00	52.30
ATOM	946	CD	GLU	279	66.440	49.159	12.001	1.00	60.23
ATOM	947	OE1	GLU	279	66.398	50.074	12.853	1.00	63.06
ATOM	948	OE2	GLU	279	65.485	48.894	11.238	1.00	65.67
ATOM	949	C	GLU	279	70.700	48.038	11.216	1.00	42.40
ATOM	950	O	GLU	279	71.330	49.001	10.787	1.00	43.89
ATOM	951	N	MET	280	70.977	47.472	12.388	1.00	40.86
ATOM	952	CA	MET	280	72.027	48.009	13.248	1.00	32.80
ATOM	953	CB	MET	280	71.435	48.415	14.603	1.00	29.25
ATOM	954	CG	MET	280	72.384	49.193	15.506	1.00	31.64
ATOM	955	SD	MET	280	71.830	49.235	17.232	1.00	34.02
ATOM	956	CE	MET	280	70.566	50.495	17.197	1.00	26.56
ATOM	957	C	MET	280	73.172	47.033	13.465	1.00	32.77
ATOM	958	O	MET	280	72.983	45.971	14.058	1.00	34.61
ATOM	959	N	ALA	281	74.351	47.375	12.959	1.00	31.87
ATOM	960	CA	ALA	281	75.523	46.526	13.147	1.00	34.71
ATOM	961	CB	ALA	281	76.519	46.727	12.023	1.00	34.42
ATOM	962	C	ALA	281	76.125	46.950	14.482	1.00	36.76
ATOM	963	O	ALA	281	76.416	48.129	14.693	1.00	34.59
ATOM	964	N	VAL	282	76.275	45.993	15.390	1.00	37.16
ATOM	965	CA	VAL	282	76.798	46.263	16.721	1.00	37.83
ATOM	966	CB	VAL	282	75.692	46.023	17.780	1.00	37.58
ATOM	967	CG1	VAL	282	76.219	46.271	19.175	1.00	48.99
ATOM	968	CG2	VAL	282	74.514	46.939	17.514	1.00	43.59
ATOM	969	C	VAL	282	78.017	45.400	17.046	1.00	39.04
ATOM	970	O	VAL	282	78.081	44.230	16.660	1.00	39.16
ATOM	971	N	LYS	283	78.989	45.993	17.735	1.00	38.75
ATOM	972	CA	LYS	283	80.205	45.287	18.136	1.00	42.18
ATOM	973	CB	LYS	283	81.428	46.208	18.045	1.00	47.46
ATOM	974	CG	LYS	283	81.803	46.617	16.632	1.00	51.71
ATOM	975	CD	LYS	283	83.092	47.416	16.618	1.00	59.26
ATOM	976	CE	LYS	283	83.481	47.813	15.202	1.00	62.52
ATOM	977	NZ	LYS	283	82.492	48.742	14.588	1.00	66.27
ATOM	978	C	LYS	283	80.075	44.746	19.559	1.00	38.78
ATOM	979	O	LYS	283	79.283	45.257	20.356	1.00	40.63
ATOM	980	N	ARG	284	80.900	43.753	19.881	1.00	36.01
ATOM	981	CA	ARG	284	80.908	43.104	21.189	1.00	38.62
ATOM	982	CB	ARG	284	82.150	42.224	21.327	1.00	38.83
ATOM	983	CG	ARG	284	82.220	41.091	20.333	1.00	41.87
ATOM	984	CD	ARG	284	83.521	40.335	20.451	1.00	39.60
ATOM	985	NE	ARG	284	83.506	39.120	19.644	1.00	45.18
ATOM	986	CZ	ARG	284	83.259	37.905	20.128	1.00	44.79
ATOM	987	NH1	ARG	284	83.005	37.739	21.421	1.00	41.84
ATOM	988	NH2	ARG	284	83.271	36.852	19.319	1.00	42.27
ATOM	989	C	ARG	284	80.829	44.051	22.385	1.00	41.18
ATOM	990	O	ARG	284	79.995	43.867	23.274	1.00	44.38
ATOM	991	N	GLU	285	81.703	45.052	22.416	1.00	38.71

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ATOM    992  CA  GLU   285      81.724  46.002  23.525  1.00 37.18
ATOM    993  CB  GLU   285      82.950  46.906  23.422  1.00 36.65
ATOM    994  C   GLU   285      80.444  46.838  23.614  1.00 35.71
ATOM    995  O   GLU   285      79.921  47.074  24.704  1.00 33.00
ATOM    996  N   GLN   286      79.920  47.245  22.463  1.00 32.01
ATOM    997  CA  GLN   286      78.714  48.061  22.425  1.00 32.31
ATOM    998  CB  GLN   286      78.440  48.525  20.997  1.00 38.24
ATOM    999  CG  GLN   286      79.565  49.352  20.392  1.00 42.42
ATOM   1000  CD  GLN   286      79.277  49.761  18.964  1.00 44.79
ATOM   1001  OE1 GLN   286      79.103  48.910  18.089  1.00 42.21
ATOM   1002  NE2 GLN   286      79.215  51.063  18.719  1.00 47.53
ATOM   1003  C   GLN   286      77.484  47.355  23.002  1.00 33.08
ATOM   1004  O   GLN   286      76.770  47.929  23.827  1.00 30.95
ATOM   1005  N   LEU   287      77.245  46.114  22.579  1.00 31.49
ATOM   1006  CA  LEU   287      76.095  45.350  23.068  1.00 31.01
ATOM   1007  CB  LEU   287      75.892  44.073  22.242  1.00 24.63
ATOM   1008  CG  LEU   287      74.498  43.780  21.661  1.00 27.34
ATOM   1009  CD1 LEU   287      74.382  42.282  21.359  1.00 20.50
ATOM   1010  CD2 LEU   287      73.393  44.205  22.616  1.00 14.41
ATOM   1011  C   LEU   287      76.298  44.986  24.538  1.00 32.80
ATOM   1012  O   LEU   287      75.351  45.014  25.334  1.00 32.10
ATOM   1013  N   LYS   288      77.536  44.641  24.885  1.00 32.54
ATOM   1014  CA  LYS   288      77.897  44.280  26.251  1.00 30.70
ATOM   1015  CB  LYS   288      79.376  43.893  26.315  1.00 31.24
ATOM   1016  CG  LYS   288      79.834  43.382  27.662  1.00 34.69
ATOM   1017  CD  LYS   288      81.227  42.784  27.574  1.00 37.69
ATOM   1018  CE  LYS   288      81.638  42.177  28.904  1.00 42.86
ATOM   1019  NZ  LYS   288      82.883  41.369  28.786  1.00 49.63
ATOM   1020  C   LYS   288      77.611  45.448  27.189  1.00 28.74
ATOM   1021  O   LYS   288      76.827  45.319  28.129  1.00 34.45
ATOM   1022  N   ASN   289      78.190  46.602  26.882  1.00 26.57
ATOM   1023  CA  ASN   289      78.011  47.803  27.691  1.00 30.84
ATOM   1024  CB  ASN   289      79.012  48.879  27.274  1.00 26.04
ATOM   1025  CG  ASN   289      80.437  48.485  27.570  1.00 35.16
ATOM   1026  OD1 ASN   289      80.700  47.718  28.499  1.00 42.54
ATOM   1027  ND2 ASN   289      81.371  48.998  26.784  1.00 32.82
ATOM   1028  C   ASN   289      76.602  48.371  27.620  1.00 35.05
ATOM   1029  O   ASN   289      76.154  49.039  28.550  1.00 36.94
ATOM   1030  N   GLY   290      75.909  48.113  26.515  1.00 32.43
ATOM   1031  CA  GLY   290      74.556  48.614  26.345  1.00 28.66
ATOM   1032  C   GLY   290      73.525  48.024  27.289  1.00 28.48
ATOM   1033  O   GLY   290      72.377  48.467  27.308  1.00 28.17
ATOM   1034  N   GLY   291      73.908  47.002  28.047  1.00 28.66
ATOM   1035  CA  GLY   291      72.969  46.408  28.980  1.00 29.19
ATOM   1036  C   GLY   291      72.976  44.894  29.075  1.00 29.76
ATOM   1037  O   GLY   291      72.595  44.340  30.105  1.00 34.44
ATOM   1038  N   LEU   292      73.399  44.213  28.017  1.00 29.69
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ATOM   1039  CA  LEU  292    73.410  42.755  28.036  1.00 30.64
ATOM   1040  CB  LEU  292    73.421  42.194  26.611  1.00 27.07
ATOM   1041  CG  LEU  292    72.113  42.348  25.833  1.00 23.27
ATOM   1042  CD1 LEU  292    72.202  41.580  24.532  1.00 22.24
ATOM   1043  CD2 LEU  292    70.950  41.827  26.661  1.00 23.80
ATOM   1044  C   LEU  292    74.530  42.125  28.861  1.00 29.22
ATOM   1045  O   LEU  292    74.365  41.033  29.404  1.00 31.02
ATOM   1046  N   GLY  293    75.671  42.800  28.945  1.00 30.26
ATOM   1047  CA  GLY  293    76.788  42.259  29.700  1.00 28.37
ATOM   1048  C   GLY  293    77.307  40.995  29.040  1.00 29.85
ATOM   1049  O   GLY  293    77.460  40.951  27.820  1.00 32.37
ATOM   1050  N   VAL  294    77.537  39.953  29.832  1.00 30.08
ATOM   1051  CA  VAL  294    78.041  38.687  29.308  1.00 31.62
ATOM   1052  CB  VAL  294    78.466  37.716  30.442  1.00 29.11
ATOM   1053  CG1 VAL  294    79.649  38.292  31.191  1.00 31.37
ATOM   1054  CG2 VAL  294    77.304  37.443  31.396  1.00 26.69
ATOM   1055  C   VAL  294    77.079  37.978  28.351  1.00 32.81
ATOM   1056  O   VAL  294    77.496  37.095  27.591  1.00 33.00
ATOM   1057  N   VAL  295    75.801  38.356  28.380  1.00 30.45
ATOM   1058  CA  VAL  295    74.814  37.752  27.487  1.00 28.02
ATOM   1059  CB  VAL  295    73.378  38.232  27.793  1.00 29.96
ATOM   1060  CG1 VAL  295    72.380  37.575  26.838  1.00 22.55
ATOM   1061  CG2 VAL  295    73.016  37.903  29.232  1.00 20.10
ATOM   1062  C   VAL  295    75.203  38.115  26.057  1.00 29.90
ATOM   1063  O   VAL  295    75.047  37.312  25.140  1.00 34.47
ATOM   1064  N   SER  296    75.762  39.309  25.886  1.00 29.11
ATOM   1065  CA  SER  296    76.215  39.771  24.581  1.00 30.96
ATOM   1066  CB  SER  296    76.785  41.184  24.702  1.00 27.26
ATOM   1067  OG  SER  296    77.300  41.648  23.469  1.00 22.93
ATOM   1068  C   SER  296    77.294  38.811  24.080  1.00 36.41
ATOM   1069  O   SER  296    77.238  38.341  22.939  1.00 38.84
ATOM   1070  N   ASP  297    78.254  38.501  24.954  1.00 35.29
ATOM   1071  CA  ASP  297    79.346  37.585  24.629  1.00 32.14
ATOM   1072  CB  ASP  297    80.245  37.356  25.851  1.00 36.57
ATOM   1073  CG  ASP  297    80.958  38.616  26.307  1.00 41.75
ATOM   1074  OD1 ASP  297    81.492  39.352  25.447  1.00 45.45
ATOM   1075  OD2 ASP  297    80.999  38.861  27.532  1.00 45.15
ATOM   1076  C   ASP  297    78.768  36.249  24.191  1.00 29.61
ATOM   1077  O   ASP  297    79.242  35.644  23.231  1.00 32.90
ATOM   1078  N   ALA  298    77.738  35.804  24.903  1.00 27.85
ATOM   1079  CA  ALA  298    77.071  34.544  24.608  1.00 27.89
ATOM   1080  CB  ALA  298    75.998  34.258  25.657  1.00 21.67
ATOM   1081  C   ALA  298    76.462  34.539  23.202  1.00 28.26
ATOM   1082  O   ALA  298    76.648  33.579  22.446  1.00 30.19
ATOM   1083  N   ILE  299    75.744  35.606  22.853  1.00 25.20
ATOM   1084  CA  ILE  299    75.119  35.708  21.537  1.00 23.46
ATOM   1085  CB  ILE  299    74.200  36.944  21.427  1.00 21.63
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ATOM	1086	CG2 ILE	299	73.491	36.946	20.078	1.00	22.20
ATOM	1087	CG1 ILE	299	73.145	36.914	22.536	1.00	19.79
ATOM	1088	CD1 ILE	299	72.245	38.139	22.578	1.00	18.33
ATOM	1089	C ILE	299	76.181	35.752	20.444	1.00	26.28
ATOM	1090	O ILE	299	76.043	35.095	19.414	1.00	31.72
ATOM	1091	N⁻ PHE	300	77.247	36.512	20.675	1.00	29.35
ATOM	1092	CA PHE	300	78.338	36.613	19.709	1.00	29.01
ATOM	1093	CB PHE	300	79.386	37.622	20.182	1.00	29.53
ATOM	1094	CG PHE	300	79.239	38.978	19.562	1.00	27.60
ATOM	1095	CD1 PHE	300	78.481	39.964	20.179	1.00	24.86
ATOM	1096	CD2 PHE	300	79.853	39.266	18.350	1.00	27.39
ATOM	1097	CE1 PHE	300	78.337	41.218	19.597	1.00	25.66
ATOM	1098	CE2 PHE	300	79.715	40.518	17.761	1.00	25.97
ATOM	1099	CZ PHE	300	78.956	41.495	18.384	1.00	21.03
ATOM	1100	C PHE	300	78.988	35.248	19.496	1.00	30.34
ATOM	1101	O PHE	300	79.309	34.873	18.367	1.00	29.35
ATOM	1102	N GLU	301	79.181	34.507	20.582	1.00	31.04
ATOM	1103	CA GLU	301	79.775	33.178	20.499	1.00	33.60
ATOM	1104	CB GLU	301	80.012	32.607	21.898	1.00	31.64
ATOM	1105	C GLU	301	78.851	32.265	19.696	1.00	33.90
ATOM	1106	O GLU	301	79.315	31.473	18.872	1.00	33.33
ATOM	1107	N LEU	302	77.546	32.386	19.935	1.00	31.13
ATOM	1108	CA LEU	302	76.556	31.581	19.227	1.00	27.57
ATOM	1109	CB LEU	302	75.150	31.842	19.776	1.00	25.24
ATOM	1110	CG LEU	302	73.994	31.131	19.059	1.00	28.59
ATOM	1111	CD1 LEU	302	74.066	29.634	19.299	1.00	25.52
ATOM	1112	CD2 LEU	302	72.660	31.682	19.532	1.00	19.30
ATOM	1113	C LEU	302	76.601	31.904	17.739	1.00	26.80
ATOM	1114	O LEU	302	76.682	31.003	16.904	1.00	27.81
ATOM	1115	N GLY	303	76.576	33.195	17.416	1.00	26.47
ATOM	1116	CA GLY	303	76.611	33.624	16.030	1.00	26.99
ATOM	1117	C GLY	303	77.845	33.133	15.295	1.00	33.46
ATOM	1118	O GLY	303	77.757	32.646	14.164	1.00	32.33
ATOM	1119	N LYS	304	78.994	33.232	15.956	1.00	34.63
ATOM	1120	CA LYS	304	80.269	32.813	15.383	1.00	36.20
ATOM	1121	CB LYS	304	81.399	33.115	16.372	1.00	41.96
ATOM	1122	CG LYS	304	82.779	33.179	15.757	1.00	47.05
ATOM	1123	CD LYS	304	83.800	33.610	16.796	1.00	59.47
ATOM	1124	CE LYS	304	85.179	33.791	16.181	1.00	65.89
ATOM	1125	NZ LYS	304	85.182	34.863	15.144	1.00	71.01
ATOM	1126	C LYS	304	80.276	31.332	14.992	1.00	33.17
ATOM	1127	O LYS	304	80.752	30.974	13.913	1.00	34.44
ATOM	1128	N SER	305	79.739	30.482	15.861	1.00	31.40
ATOM	1129	CA SER	305	79.687	29.048	15.594	1.00	33.10
ATOM	1130	CB SER	305	79.513	28.266	16.900	1.00	34.10
ATOM	1131	OG SER	305	78.391	28.727	17.633	1.00	40.61
ATOM	1132	C SER	305	78.597	28.664	14.589	1.00	33.02

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ATOM   1133  O   SER   305    78.771  27.718  13.816  1.00 35.32
ATOM   1134  N   LEU   306    77.488  29.404  14.580  1.00 32.14
ATOM   1135  CA  LEU   306    76.391  29.121  13.653  1.00 31.02
ATOM   1136  CB  LEU   306    75.138  29.936  13.996  1.00 22.76
ATOM   1137  CG  LEU   306    74.361  29.487  15.235  1.00 24.42
ATOM   1138  CD1 LEU   306    73.094  30.311  15.380  1.00 23.13
ATOM . 1139  CD2 LEU   306    74.016  28.009  15.126  1.00 25.53
ATOM   1140  C   LEU   306    76.780  29.354  12.198  1.00 33.11
ATOM   1141  O   LEU   306    76.161  28.796  11.293  1.00 32.60
ATOM   1142  N   SER   307    77.821  30.153  11.975  1.00 36.12
ATOM   1143  CA  SER   307    78.296  30.448  10.624  1.00 38.80
ATOM   1144  CB  SER   307    79.514  31.373  10.677  1.00 41.64
ATOM   1145  OG  SER   307    79.224  32.556  11.401  1.00 54.66
ATOM   1146  C   SER   307    78.650  29.182   9.845  1.00 36.98
ATOM   1147  O   SER   307    78.302  29.055   8.669  1.00 42.87
ATOM   1148  N   ALA   308    79.315  28.239  10.509  1.00 35.72
ATOM   1149  CA  ALA   308    79.719  26.983   9.879  1.00 32.70
ATOM   1150  CB  ALA   308    80.683  26.227  10.782  1.00 33.88
ATOM   1151  C   ALA   308    78.531  26.093   9.521  1.00 34.83
ATOM   1152  O   ALA   308    78.620  25.278   8.600  1.00 39.61
ATOM   1153  N   PHE   309    77.424  26.250  10.244  1.00 31.54
ATOM   1154  CA  PHE   309    76.226  25.453   9.999  1.00 32.43
ATOM   1155  CB  PHE   309    75.259  25.558  11.182  1.00 30.89
ATOM   1156  CG  PHE   309    75.718  24.826  12.415  1.00 33.73
ATOM   1157  CD1 PHE   309    76.769  25.314  13.183  1.00 40.48
ATOM   1158  CD2 PHE   309    75.091  23.654  12.816  1.00 35.96
ATOM   1159  CE1 PHE   309    77.189  24.643  14.334  1.00 37.87
ATOM   1160  CE2 PHE   309    75.502  22.975  13.962  1.00 38.44
ATOM   1161  CZ  PHE   309    76.553  23.471  14.722  1.00 37.34
ATOM   1162  C   PHE   309    75.507  25.809   8.693  1.00 34.76
ATOM   1163  O   PHE   309    74.810  24.969   8.118  1.00 36.18
ATOM   1164  N   ASN   310    75.693  27.040   8.218  1.00 35.80
ATOM   1165  CA  ASN   310    75.060  27.506   6.980  1.00 41.00
ATOM   1166  CB  ASN   310    75.705  26.852   5.755  1.00 51.94
ATOM   1167  CG  ASN   310    77.053  27.452   5.419  1.00 67.92
ATOM   1168  OD1 ASN   310    77.139  28.439   4.687  1.00 77.32
ATOM   1169  ND2 ASN   310    78.116  26.869   5.962  1.00 72.62
ATOM   1170  C   ASN   310    73.560  27.245   6.985  1.00 38.15
ATOM   1171  O   ASN   310    73.034  26.515   6.141  1.00 35.87
ATOM   1172  N   LEU   311    72.885  27.819   7.971  1.00 33.94
ATOM   1173  CA  LEU   311    71.450  27.651   8.111  1.00 32.09
ATOM   1174  CB  LEU   311    71.011  28.009   9.533  1.00 28.06
ATOM   1175  CG  LEU   311    71.656  27.301  10.724  1.00 26.38
ATOM   1176  CD1 LEU   311    71.092  27.883  12.012  1.00 23.56
ATOM   1177  CD2 LEU   311    71.409  25.801  10.651  1.00 21.24
ATOM   1178  C   LEU   311    70.705  28.542   7.124  1.00 33.00
ATOM   1179  O   LEU   311    71.173  29.630   6.782  1.00 35.47
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ATOM  1180  N   ASP  312    69.569  28.057   6.638  1.00 27.78
ATOM  1181  CA  ASP  312    68.749  28.841   5.733  1.00 27.06
ATOM  1182  CB  ASP  312    68.385  28.049   4.456  1.00 25.84
ATOM  1183  CG  ASP  312    67.580  26.778   4.724  1.00 25.67
ATOM  1184  OD1 ASP  312    67.124  26.541   5.860  1.00 28.20
ATOM  1185  OD2 ASP  312    67.387  26.008   3.762  1.00 27.62
ATOM  1186  C   ASP  312    67.517  29.314   6.514  1.00 28.51
ATOM  1187  O   ASP  312    67.371  28.990   7.703  1.00 25.35
ATOM  1188  N   ASP  313    66.633  30.060   5.855  1.00 22.16
ATOM  1189  CA  ASP  313    65.430  30.589   6.494  1.00 21.37
ATOM  1190  CB  ASP  313    64.625  31.431   5.499  1.00 25.11
ATOM  1191  CG  ASP  313    65.380  32.666   5.025  1.00 31.54
ATOM  1192  OD1 ASP  313    65.119  33.115   3.890  1.00 35.35
ATOM  1193  OD2 ASP  313    66.225  33.193   5.783  1.00 35.37
ATOM  1194  C   ASP  313    64.524  29.535   7.120  1.00 21.11
ATOM  1195  O   ASP  313    63.904  29.783   8.158  1.00 23.68
ATOM  1196  N   THR  314    64.440  28.367   6.489  1.00 22.88
ATOM  1197  CA  THR  314    63.591  27.281   6.981  1.00 22.81
ATOM  1198  CB  THR  314    63.472  26.155   5.927  1.00 26.00
ATOM  1199  OG1 THR  314    62.873  26.679   4.732  1.00 20.14
ATOM  1200  CG2 THR  314    62.629  25.010   6.457  1.00 17.51
ATOM  1201  C   THR  314    64.086  26.706   8.310  1.00 19.46
ATOM  1202  O   THR  314    63.312  26.529   9.247  1.00 19.33
ATOM  1203  N   GLU  315    65.381  26.431   8.392  1.00 17.49
ATOM  1204  CA  GLU  315    65.965  25.885   9.611  1.00 20.62
ATOM  1205  CB  GLU  315    67.426  25.514   9.358  1.00 14.39
ATOM  1206  CG  GLU  315    67.539  24.339   8.400  1.00 13.07
ATOM  1207  CD  GLU  315    68.923  24.125   7.835  1.00 14.98
ATOM  1208  OE1 GLU  315    69.634  25.116   7.552  1.00 17.71
ATOM  1209  OE2 GLU  315    69.287  22.948   7.651  1.00 17.88
ATOM  1210  C   GLU  315    65.810  26.883  10.762  1.00 20.57
ATOM  1211  O   GLU  315    65.368  26.518  11.854  1.00 18.43
ATOM  1212  N   VAL  316    66.096  28.154  10.488  1.00 19.19
ATOM  1213  CA  VAL  316    65.955  29.203  11.490  1.00 16.53
ATOM  1214  CB  VAL  316    66.418  30.567  10.933  1.00 17.42
ATOM  1215  CG1 VAL  316    66.149  31.687  11.940  1.00 13.89
ATOM  1216  CG2 VAL  316    67.900  30.506  10.594  1.00 14.31
ATOM  1217  C   VAL  316    64.488  29.291  11.927  1.00 19.53
ATOM  1218  O   VAL  316    64.191  29.448  13.110  1.00 19.86
ATOM  1219  N   ALA  317    63.575  29.159  10.970  1.00 19.02
ATOM  1220  CA  ALA  317    62.145  29.215  11.254  1.00 16.95
ATOM  1221  CB  ALA  317    61.357  29.239   9.951  1.00 17.68
ATOM  1222  C   ALA  317    61.674  28.047  12.126  1.00 14.13
ATOM  1223  O   ALA  317    60.875  28.228  13.045  1.00 15.34
ATOM  1224  N   LEU  318    62.154  26.847  11.819  1.00 17.41
ATOM  1225  CA  LEU  318    61.769  25.653  12.569  1.00 19.10
ATOM  1226  CB  LEU  318    62.186  24.398  11.802  1.00 18.21
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ATOM   1227 CG  LEU   318    61.443 24.209 10.473 1.00 19.02
ATOM   1228 CD1 LEU   318    62.105 23.128  9.646 1.00 16.10
ATOM   1229 CD2 LEU   318    59.987 23.875 10.735 1.00 11.32
ATOM   1230 C   LEU   318    62.399 25.685 13.954 1.00 22.38
ATOM   1231 O   LEU   318    61.782 25.278 14.945 1.00 21.64
ATOM   1232 N- LEU   319    63.619 26.207 14.016 1.00 20.97
ATOM   1233 CA  LEU   319    64.338 26.344 15.270 1.00 19.71
ATOM   1234 CB  LEU   319    65.715 26.951 15.005 1.00 20.56
ATOM   1235 CG  LEU   319    66.722 27.036 16.152 1.00 32.05
ATOM   1236 CD1 LEU   319    66.704 25.760 16.963 1.00 33.15
ATOM   1237 CD2 LEU   319    68.109 27.303 15.590 1.00 28.25
ATOM   1238 C   LEU   319    63.496 27.254 16.164 1.00 20.66
ATOM   1239 O   LEU   319    63.215 26.920 17.313 1.00 24.47
ATOM   1240 N   GLN   320    63.026 28.365 15.604 1.00 19.25
ATOM   1241 CA  GLN   320    62.191 29.307 16.346 1.00 19.02
ATOM   1242 CB  GLN   320    61.842 30.526 15.488 1.00 19.11
ATOM   1243 CG  GLN   320    63.032 31.377 15.101 1.00 20.02
ATOM   1244 CD  GLN   320    62.665 32.562 14.224 1.00 23.65
ATOM   1245 OE1 GLN   320    63.487 33.445 13.997 1.00 22.68
ATOM   1246 NE2 GLN   320    61.440 32.574 13.704 1.00 20.77
ATOM   1247 C   GLN   320    60.905 28.635 16.811 1.00 20.52
ATOM   1248 O   GLN   320    60.465 28.845 17.938 1.00 22.04
ATOM   1249 N   ALA   321    60.306 27.825 15.942 1.00 21.01
ATOM   1250 CA  ALA   321    59.069 27.128 16.280 1.00 16.83
ATOM   1251 CB  ALA   321    58.556 26.358 15.079 1.00 16.58
ATOM   1252 C   ALA   321    59.288 26.185 17.462 1.00 18.15
ATOM   1253 O   ALA   321    58.427 26.069 18.344 1.00 13.03
ATOM   1254 N   VAL   322    60.442 25.523 17.481 1.00 14.89
ATOM   1255 CA  VAL   322    60.774 24.599 18.559 1.00 19.05
ATOM   1256 CB  VAL   322    62.051 23.779 18.233 1.00 21.50
ATOM   1257 CG1 VAL   322    62.510 22.990 19.457 1.00 21.49
ATOM   1258 CG2 VAL   322    61.773 22.819 17.073 1.00 15.42
ATOM   1259 C   VAL   322    60.947 25.375 19.867 1.00 19.89
ATOM   1260 O   VAL   322    60.478 24.940 20.919 1.00 21.58
ATOM   1261 N   LEU   323    61.591 26.537 19.788 1.00 20.25
ATOM   1262 CA  LEU   323    61.804 27.387 20.959 1.00 19.32
ATOM   1263 CB  LEU   323    62.683 28.586 20.597 1.00 12.95
ATOM   1264 CG  LEU   323    64.129 28.273 20.217 1.00 20.70
ATOM   1265 CD1 LEU   323    64.805 29.503 19.641 1.00 13.23
ATOM   1266 CD2 LEU   323    64.883 27.767 21.438 1.00 22.91
ATOM   1267 C   LEU   323    60.468 27.884 21.497 1.00 20.25
ATOM   1268 O   LEU   323    60.251 27.918 22.706 1.00 25.88
ATOM   1269 N   LEU   324    59.571 28.251 20.587 1.00 23.08
ATOM   1270 CA  LEU   324    58.248 28.753 20.944 1.00 21.24
ATOM   1271 CB  LEU   324    57.555 29.333 19.707 1.00 18.45
ATOM   1272 CG  LEU   324    56.119 29.847 19.868 1.00 17.07
ATOM   1273 CD1 LEU   324    56.083 31.092 20.752 1.00 15.39
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ATOM   1274  CD2 LEU   324    55.545  30.162  18.498  1.00 17.90
ATOM   1275  C   LEU   324    57.342  27.706  21.598  1.00 21.54
ATOM   1276  O   LEU   324    56.742  27.967  22.642  1.00 23.41
ATOM   1277  N   MET   325    57.249  26.521  21.003  1.00 24.63
ATOM   1278  CA  MET   325    56.380  25.476  21.545  1.00 25.35
ATOM   1279  CB  MET   325    55.901  24.536  20.430  1.00 25.53
ATOM   1280  CG  MET   325    55.235  25.220  19.232  1.00 21.89
ATOM   1281  SD  MET   325    53.871  26.337  19.649  1.00 25.50
ATOM   1282  CE  MET   325    52.705  25.250  20.397  1.00 17.66
ATOM   1283  C   MET   325    57.031  24.676  22.675  1.00 27.58
ATOM   1284  O   MET   325    56.988  23.450  22.690  1.00 28.61
ATOM   1285  N   SER   326    57.613  25.376  23.638  1.00 27.98
ATOM   1286  CA  SER   326    58.265  24.718  24.757  1.00 31.60
ATOM   1287  CB  SER   326    59.527  25.493  25.155  1.00 35.80
ATOM   1288  OG  SER   326    60.123  24.966  26.327  1.00 43.74
ATOM   1289  C   SER   326    57.313  24.624  25.939  1.00 32.12
ATOM   1290  O   SER   326    56.590  25.574  26.240  1.00 30.91
ATOM   1291  N   THR   327    57.276  23.464  26.583  1.00 35.41
ATOM   1292  CA  THR   327    56.420  23.278  27.747  1.00 39.61
ATOM   1293  CB  THR   327    55.777  21.890  27.758  1.00 38.84
ATOM   1294  OG1 THR   327    56.784  20.890  27.538  1.00 42.53
ATOM   1295  CG2 THR   327    54.716  21.802  26.679  1.00 40.78
ATOM   1296  C   THR   327    57.232  23.471  29.022  1.00 43.86
ATOM   1297  O   THR   327    56.785  23.133  30.118  1.00 42.40
ATOM   1298  N   ASP   328    58.417  24.054  28.869  1.00 47.35
ATOM   1299  CA  ASP   328    59.309  24.308  29.987  1.00 49.43
ATOM   1300  CB  ASP   328    60.750  24.358  29.482  1.00 58.03
ATOM   1301  CG  ASP   328    61.718  23.687  30.425  1.00 72.16
ATOM   1302  OD1 ASP   328    61.816  24.117  31.595  1.00 82.32
ATOM   1303  OD2 ASP   328    62.378  22.720  29.994  1.00 81.63
ATOM   1304  C   ASP   328    58.951  25.625  30.676  1.00 47.99
ATOM   1305  O   ASP   328    59.830  26.373  31.093  1.00 53.33
ATOM   1306  N   ARG   329    57.657  25.910  30.780  1.00 48.33
ATOM   1307  CA  ARG   329    57.177  27.135  31.413  1.00 47.67
ATOM   1308  CB  ARG   329    56.562  28.091  30.379  1.00 47.64
ATOM   1309  CG  ARG   329    57.550  28.802  29.450  1.00 47.87
ATOM   1310  CD  ARG   329    57.893  27.968  28.226  1.00 44.00
ATOM   1311  NE  ARG   329    58.759  28.682  27.288  1.00 41.17
ATOM   1312  CZ  ARG   329    60.087  28.605  27.283  1.00 48.58
ATOM   1313  NH1 ARG   329    60.719  27.848  28.172  1.00 52.94
ATOM   1314  NH2 ARG   329    60.784  29.257  26.362  1.00 43.16
ATOM   1315  C   ARG   329    56.126  26.778  32.457  1.00 48.01
ATOM   1316  O   ARG   329    55.573  25.677  32.437  1.00 50.22
ATOM   1317  N   SER   330    55.832  27.716  33.351  1.00 47.37
ATOM   1318  CA  SER   330    54.848  27.490  34.402  1.00 47.64
ATOM   1319  CB  SER   330    55.376  28.021  35.736  1.00 46.62
ATOM   1320  C   SER   330    53.506  28.139  34.074  1.00 46.40
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ATOM  1321  O   SER  330    53.460  29.252  33.548  1.00  48.49
ATOM  1322  N   GLY  331    52.421  27.424  34.359  1.00  44.16
ATOM  1323  CA  GLY  331    51.090  27.956  34.123  1.00  41.44
ATOM  1324  C   GLY  331    50.424  27.660  32.790  1.00  42.83
ATOM  1325  O   GLY  331    49.478  28.351  32.413  1.00  45.88
ATOM  1326  N-  LEU  332    50.889  26.643  32.075  1.00  40.10
ATOM  1327  CA  LEU  332    50.288  26.300  30.789  1.00  39.27
ATOM  1328  CB  LEU  332    51.301  25.596  29.885  1.00  37.42
ATOM  1329  CG  LEU  332    52.436  26.426  29.291  1.00  35.35
ATOM  1330  CD1 LEU  332    53.374  25.505  28.530  1.00  31.61
ATOM  1331  CD2 LEU  332    51.875  27.511  28.376  1.00  31.82
ATOM  1332  C   LEU  332    49.058  25.415  30.951  1.00  39.32
ATOM  1333  O   LEU  332    49.060  24.467  31.738  1.00  42.74
ATOM  1334  N   LEU  333    48.009  25.730  30.202  1.00  37.62
ATOM  1335  CA  LEU  333    46.778  24.953  30.241  1.00  41.30
ATOM  1336  CB  LEU  333    45.586  25.835  29.852  1.00  43.52
ATOM  1337  CG  LEU  333    45.125  26.904  30.848  1.00  49.39
ATOM  1338  CD1 LEU  333    44.296  27.970  30.142  1.00  46.19
ATOM  1339  CD2 LEU  333    44.330  26.248  31.968  1.00  51.29
ATOM  1340  C   LEU  333    46.859  23.762  29.285  1.00  41.39
ATOM  1341  O   LEU  333    46.565  22.628  29.657  1.00  43.41
ATOM  1342  N   CYA  334    47.317  24.024  28.067  1.00  42.18
ATOM  1343  CA  CYA  334    47.409  23.003  27.029  1.00  39.56
ATOM  1344  CB  CYA  334    47.004  23.616  25.691  1.00  45.48
ATOM  1345  SG  CYA  334    45.517  24.616  25.785  1.00  51.57
ATOM  1346  AS  CYA  334    44.187  22.808  25.555  1.00  90.90
ATOM  1347  C   CYA  334    48.776  22.347  26.891  1.00  38.28
ATOM  1348  O   CYA  334    49.273  22.178  25.778  1.00  40.95
ATOM  1349  N   VAL  335    49.345  21.913  28.009  1.00  36.05
ATOM  1350  CA  VAL  335    50.661  21.278  28.006  1.00  35.78
ATOM  1351  CB  VAL  335    50.996  20.679  29.399  1.00  35.53
ATOM  1352  CG1 VAL  335    52.413  20.123  29.407  1.00  32.76
ATOM  1353  CG2 VAL  335    50.822  21.729  30.490  1.00  28.87
ATOM  1354  C   VAL  335    50.776  20.170  26.950  1.00  36.41
ATOM  1355  O   VAL  335    51.756  20.104  26.202  1.00  34.26
ATOM  1356  N   ASP  336    49.756  19.323  26.880  1.00  38.42
ATOM  1357  CA  ASP  336    49.736  18.209  25.942  1.00  39.71
ATOM  1358  CB  ASP  336    48.485  17.359  26.179  1.00  51.53
ATOM  1359  CG  ASP  336    48.534  16.028  25.452  1.00  65.98
ATOM  1360  OD1 ASP  336    49.240  15.114  25.934  1.00  70.75
ATOM  1361  OD2 ASP  336    47.858  15.891  24.406  1.00  72.15
ATOM  1362  C   ASP  336    49.794  18.668  24.486  1.00  37.72
ATOM  1363  O   ASP  336    50.686  18.259  23.733  1.00  32.08
ATOM  1364  N   LYS  337    48.858  19.532  24.100  1.00  33.78
ATOM  1365  CA  LYS  337    48.797  20.040  22.731  1.00  28.00
ATOM  1366  CB  LYS  337    47.626  21.022  22.574  1.00  22.46
ATOM  1367  C   LYS  337    50.116  20.704  22.334  1.00  29.06
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ATOM   1368  O   LYS   337    50.607  20.512  21.220  1.00  28.41
ATOM   1369  N   ILE   338    50.705  21.449  23.267  1.00  27.56
ATOM   1370  CA  ILE   338    51.964  22.138  23.022  1.00  25.03
ATOM   1371  CB  ILE   338    52.274  23.149  24.144  1.00  19.49
ATOM   1372  CG2 ILE   338    53.577  23.876  23.859  1.00  19.00
ATOM   1373  CG1 ILE   338    51.135  24.167  24.232  1.00  21.97
ATOM   1374  CD1 ILE   338    51.277  25.175  25.348  1.00  26.67
ATOM   1375  C   ILE   338    53.119  21.153  22.826  1.00  29.97
ATOM   1376  O   ILE   338    53.935  21.328  21.914  1.00  31.00
ATOM   1377  N   GLU   339    53.165  20.100  23.642  1.00  33.52
ATOM   1378  CA  GLU   339    54.213  19.080  23.516  1.00  35.34
ATOM   1379  CB  GLU   339    54.136  18.062  24.659  1.00  39.97
ATOM   1380  CG  GLU   339    54.653  18.585  25.986  1.00  53.23
ATOM   1381  CD  GLU   339    54.549  17.579  27.126  1.00  61.16
ATOM   1382  OE1 GLU   339    53.602  16.759  27.131  1.00  64.30
ATOM   1383  OE2 GLU   339    55.412  17.622  28.031  1.00  57.76
ATOM   1384  C   GLU   339    54.091  18.353  22.178  1.00  31.63
ATOM   1385  O   GLU   339    55.086  18.123  21.491  1.00  28.96
ATOM   1386  N   LYS   340    52.861  18.006  21.810  1.00  30.95
ATOM   1387  CA  LYS   340    52.602  17.313  20.554  1.00  31.58
ATOM   1388  CB  LYS   340    51.121  16.966  20.438  1.00  31.83
ATOM   1389  C   LYS   340    53.057  18.159  19.358  1.00  29.84
ATOM   1390  O   LYS   340    53.696  17.640  18.438  1.00  31.58
ATOM   1391  N   SER   341    52.765  19.460  19.388  1.00  25.33
ATOM   1392  CA  SER   341    53.165  20.351  18.297  1.00  23.92
ATOM   1393  CB  SER   341    52.468  21.707  18.400  1.00  24.02
ATOM   1394  OG  SER   341    52.700  22.302  19.657  1.00  48.88
ATOM   1395  C   SER   341    54.677  20.533  18.240  1.00  24.39
ATOM   1396  O   SER   341    55.254  20.593  17.150  1.00  24.71
ATOM   1397  N   GLN   342    55.324  20.606  19.405  1.00  25.45
ATOM   1398  CA  GLN   342    56.777  20.751  19.437  1.00  26.66
ATOM   1399  CB  GLN   342    57.311  20.975  20.853  1.00  22.77
ATOM   1400  CG  GLN   342    58.805  21.307  20.840  1.00  25.76
ATOM   1401  CD  GLN   342    59.427  21.371  22.214  1.00  28.46
ATOM   1402  OE1 GLN   342    59.342  20.422  22.990  1.00  34.22
ATOM   1403  NE2 GLN   342    60.080  22.483  22.517  1.00  30.01
ATOM   1404  C   GLN   342    57.425  19.504  18.843  1.00  23.37
ATOM   1405  O   GLN   342    58.414  19.598  18.106  1.00  23.65
ATOM   1406  N   GLU   343    56.864  18.340  19.162  1.00  21.48
ATOM   1407  CA  GLU   343    57.370  17.076  18.641  1.00  20.74
ATOM   1408  CB  GLU   343    56.599  15.902  19.247  1.00  22.09
ATOM   1409  C   GLU   343    57.225  17.094  17.119  1.00  19.18
ATOM   1410  O   GLU   343    58.156  16.743  16.393  1.00  21.11
ATOM   1411  N   ALA   344    56.077  17.570  16.648  1.00  19.93
ATOM   1412  CA  ALA   344    55.803  17.662  15.217  1.00  20.20
ATOM   1413  CB  ALA   344    54.411  18.216  14.989  1.00  16.46
ATOM   1414  C   ALA   344    56.850  18.539  14.528  1.00  20.75
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ATOM	1415	O	ALA	344	57.432	18.140	13.514	1.00	25.13
ATOM	1416	N	TYR	345	57.105	19.722	15.088	1.00	21.31
ATOM	1417	CA	TYR	345	58.107	20.631	14.531	1.00	15.93
ATOM	1418	CB	TYR	345	58.127	21.969	15.282	1.00	17.29
ATOM	1419	CG	TYR	345	57.049	22.927	14.833	1.00	16.11
ATOM	1420	CD1	TYR	345	56.017	23.296	15.689	1.00	9.93
ATOM	1421	CE1	TYR	345	54.999	24.138	15.263	1.00	16.95
ATOM	1422	CD2	TYR	345	57.041	23.431	13.531	1.00	19.84
ATOM	1423	CE2	TYR	345	56.026	24.276	13.094	1.00	17.13
ATOM	1424	CZ	TYR	345	55.005	24.622	13.963	1.00	18.12
ATOM	1425	OH	TYR	345	53.980	25.430	13.530	1.00	26.25
ATOM	1426	C	TYR	345	59.493	20.008	14.554	1.00	20.65
ATOM	1427	O	TYR	345	60.240	20.129	13.583	1.00	20.75
ATOM	1428	N	LEU	346	59.832	19.337	15.655	1.00	22.14
ATOM	1429	CA	LEU	346	61.134	18.684	15.803	1.00	19.43
ATOM	1430	CB	LEU	346	61.267	18.041	17.186	1.00	19.92
ATOM	1431	CG	LEU	346	61.683	18.945	18.347	1.00	25.56
ATOM	1432	CD1	LEU	346	61.440	18.244	19.677	1.00	22.06
ATOM	1433	CD2	LEU	346	63.147	19.332	18.197	1.00	17.62
ATOM	1434	C	LEU	346	61.359	17.635	14.723	1.00	19.30
ATOM	1435	O	LEU	346	62.441	17.560	14.142	1.00	22.84
ATOM	1436	N	LEU	347	60.337	16.826	14.456	1.00	25.17
ATOM	1437	CA	LEU	347	60.423	15.790	13.427	1.00	24.55
ATOM	1438	CB	LEU	347	59.187	14.892	13.453	1.00	25.47
ATOM	1439	CG	LEU	347	59.256	13.654	14.345	1.00	30.65
ATOM	1440	CD1	LEU	347	57.941	12.890	14.258	1.00	34.28
ATOM	1441	CD2	LEU	347	60.416	12.765	13.908	1.00	28.26
ATOM	1442	C	LEU	347	60.584	16.400	12.042	1.00	24.00
ATOM	1443	O	LEU	347	61.399	15.932	11.245	1.00	29.74
ATOM	1444	N	ALA	348	59.809	17.443	11.761	1.00	22.72
ATOM	1445	CA	ALA	348	59.875	18.125	10.475	1.00	19.19
ATOM	1446	CB	ALA	348	58.789	19.188	10.388	1.00	22.73
ATOM	1447	C	ALA	348	61.246	18.762	10.316	1.00	20.34
ATOM	1448	O	ALA	348	61.881	18.633	9.274	1.00	23.94
ATOM	1449	N	PHE	349	61.707	19.402	11.388	1.00	22.19
ATOM	1450	CA	PHE	349	63.001	20.078	11.435	1.00	19.41
ATOM	1451	CB	PHE	349	63.185	20.701	12.832	1.00	17.45
ATOM	1452	CG	PHE	349	64.371	21.632	12.963	1.00	18.70
ATOM	1453	CD1	PHE	349	65.183	21.943	11.874	1.00	19.09
ATOM	1454	CD2	PHE	349	64.669	22.203	14.199	1.00	21.81
ATOM	1455	CE1	PHE	349	66.270	22.811	12.012	1.00	21.49
ATOM	1456	CE2	PHE	349	65.753	23.072	14.351	1.00	18.58
ATOM	1457	CZ	PHE	349	66.555	23.376	13.256	1.00	18.67
ATOM	1458	C	PHE	349	64.110	19.071	11.136	1.00	20.96
ATOM	1459	O	PHE	349	64.967	19.311	10.283	1.00	25.19
ATOM	1460	N	GLU	350	64.076	17.935	11.824	1.00	23.96
ATOM	1461	CA	GLU	350	65.077	16.888	11.642	1.00	27.98

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ATOM   1462  CB  GLU   350      64.794  15.721  12.591  1.00 28.90
ATOM   1463  CG  GLU   350      65.738  14.542  12.413  1.00 39.36
ATOM   1464  CD  GLU   350      65.603  13.497  13.505  1.00 41.62
ATOM   1465  OE1 GLU   350      64.475  13.260  13.988  1.00 43.67
ATOM   1466  OE2 GLU   350      66.636  12.908  13.876  1.00 49.64
ATOM   1467  C-  GLU   350      65.100  16.385  10.203  1.00 27.12
ATOM   1468  O   GLU   350      66.158  16.288   9.577  1.00 27.44
ATOM   1469  N   HIS   351      63.918  16.088   9.678  1.00 27.36
ATOM   1470  CA  HIS   351      63.787  15.591   8.318  1.00 23.97
ATOM   1471  CB  HIS   351      62.366  15.087   8.090  1.00 22.89
ATOM   1472  CG  HIS   351      61.991  13.945   8.986  1.00 24.58
ATOM   1473  CD2 HIS   351      62.736  13.209   9.846  1.00 25.83
ATOM   1474  ND1 HIS   351      60.709  13.448   9.073  1.00 26.50
ATOM   1475  CE1 HIS   351      60.677  12.460   9.948  1.00 24.81
ATOM   1476  NE2 HIS   351      61.896  12.295  10.431  1.00 28.42
ATOM   1477  C   HIS   351      64.200  16.635   7.278  1.00 24.22
ATOM   1478  O   HIS   351      64.757  16.287   6.236  1.00 25.79
ATOM   1479  N   TYR   352      63.969  17.912   7.572  1.00 21.04
ATOM   1480  CA  TYR   352      64.363  18.974   6.654  1.00 18.98
ATOM   1481  CB  TYR   352      63.770  20.321   7.067  1.00 17.08
ATOM   1482  CG  TYR   352      64.127  21.413   6.090  1.00 21.83
ATOM   1483  CD1 TYR   352      63.537  21.467   4.828  1.00 20.07
ATOM   1484  CE1 TYR   352      63.941  22.411   3.883  1.00 23.51
ATOM   1485  CD2 TYR   352      65.121  22.339   6.388  1.00 19.94
ATOM   1486  CE2 TYR   352      65.531  23.284   5.452  1.00 20.85
ATOM   1487  CZ  TYR   352      64.942  23.313   4.203  1.00 24.80
ATOM   1488  OH  TYR   352      65.380  24.221   3.269  1.00 26.74
ATOM   1489  C   TYR   352      65.889  19.055   6.624  1.00 20.58
ATOM   1490  O   TYR   352      66.492  19.276   5.570  1.00 22.72
ATOM   1491  N   VAL   353      66.508  18.877   7.789  1.00 28.34
ATOM   1492  CA  VAL   353      67.967  18.892   7.904  1.00 22.38
ATOM   1493  CB  VAL   353      68.419  18.755   9.389  1.00 26.46
ATOM   1494  CG1 VAL   353      69.915  18.527   9.478  1.00 20.92
ATOM   1495  CG2 VAL   353      68.053  20.009  10.165  1.00 22.46
ATOM   1496  C   VAL   353      68.518  17.725   7.078  1.00 23.51
ATOM   1497  O   VAL   353      69.535  17.865   6.391  1.00 24.73
ATOM   1498  N   ASN   354      67.850  16.575   7.158  1.00 20.93
ATOM   1499  CA  ASN   354      68.252  15.392   6.397  1.00 27.25
ATOM   1500  CB  ASN   354      67.320  14.210   6.680  1.00 28.43
ATOM   1501  CG  ASN   354      67.521  13.607   8.058  1.00 31.50
ATOM   1502  OD1 ASN   354      68.565  13.787   8.692  1.00 37.79
ATOM   1503  ND2 ASN   354      66.521  12.867   8.524  1.00 26.44
ATOM   1504  C   ASN   354      68.182  15.721   4.908  1.00 31.27
ATOM   1505  O   ASN   354      69.066  15.347   4.134  1.00 34.22
ATOM   1506  N   HIS   355      67.124  16.429   4.520  1.00 30.49
ATOM   1507  CA  HIS   355      66.917  16.826   3.132  1.00 26.88
ATOM   1508  CB  HIS   355      65.548  17.494   2.975  1.00 27.27
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ATOM  1509  CG  HIS  355     65.319  18.103   1.625  1.00 37.76
ATOM  1510  CD2 HIS  355     65.439  19.382   1.196  1.00 35.28
ATOM  1511  ND1 HIS  355     64.913  17.369   0.532  1.00 34.93
ATOM  1512  CE1 HIS  355     64.789  18.169  -0.513  1.00 34.84
ATOM  1513  NE2 HIS  355     65.104  19.394  -0.135  1.00 33.13
ATOM  1514  C-  HIS  355     68.016  17.748   2.610  1.00 24.66
ATOM  1515  O   HIS  355     68.420  17.630   1.456  1.00 26.62
ATOM  1516  N   ARG  356     68.487  18.670   3.448  1.00 25.86
ATOM  1517  CA  ARG  356     69.536  19.608   3.040  1.00 26.94
ATOM  1518  CB  ARG  356     69.620  20.791   3.996  1.00 20.57
ATOM  1519  CG  ARG  356     68.453  21.727   3.899  1.00 19.69
ATOM  1520  CD  ARG  356     68.866  23.110   4.340  1.00 23.81
ATOM  1521  NE  ARG  356     69.768  23.746   3.388  1.00 23.14
ATOM  1522  CZ  ARG  356     70.641  24.697   3.702  1.00 24.11
ATOM  1523  NH1 ARG  356     70.755  25.129   4.949  1.00 26.29
ATOM  1524  NH2 ARG  356     71.384  25.242   2.754  1.00 32.79
ATOM  1525  C   ARG  356     70.921  19.002   2.875  1.00 29.38
ATOM  1526  O   ARG  356     71.795  19.607   2.257  1.00 32.91
ATOM  1527  N   LYS  357     71.133  17.848   3.498  1.00 33.39
ATOM  1528  CA  LYS  357     72.401  17.128   3.417  1.00 35.97
ATOM  1529  CB  LYS  357     72.479  16.363   2.089  1.00 40.55
ATOM  1530  CG  LYS  357     71.327  15.381   1.891  1.00 44.03
ATOM  1531  CD  LYS  357     71.360  14.722   0.523  1.00 52.31
ATOM  1532  CE  LYS  357     70.171  13.787   0.343  1.00 56.99
ATOM  1533  NZ  LYS  357     70.208  13.085  -0.970  1.00 64.78
ATOM  1534  C   LYS  357     73.657  17.981   3.629  1.00 38.55
ATOM  1535  O   LYS  357     74.518  18.079   2.748  1.00 42.50
ATOM  1536  N   HIS  358     73.751  18.601   4.802  1.00 35.00
ATOM  1537  CA  HIS  358     74.906  19.418   5.155  1.00 32.94
ATOM  1538  CB  HIS  358     74.732  20.018   6.552  1.00 27.62
ATOM  1539  CG  HIS  358     73.669  21.067   6.643  1.00 26.64
ATOM  1540  CD2 HIS  358     72.330  20.968   6.819  1.00 20.85
ATOM  1541  ND1 HIS  358     73.950  22.416   6.587  1.00 24.71
ATOM  1542  CE1 HIS  358     72.831  23.103   6.724  1.00 21.02
ATOM  1543  NE2 HIS  358     71.834  22.248   6.865  1.00 21.42
ATOM  1544  C   HIS  358     76.140  18.520   5.176  1.00 36.60
ATOM  1545  O   HIS  358     76.072  17.379   5.635  1.00 38.73
ATOM  1546  N   ASN  359     77.267  19.037   4.702  1.00 41.40
ATOM  1547  CA  ASN  359     78.515  18.277   4.689  1.00 45.02
ATOM  1548  CB  ASN  359     79.441  18.799   3.587  1.00 42.57
ATOM  1549  C   ASN  359     79.193  18.386   6.058  1.00 46.59
ATOM  1550  O   ASN  359     80.405  18.588   6.150  1.00 52.31
ATOM  1551  N   ILE  360     78.400  18.254   7.117  1.00 45.14
ATOM  1552  CA  ILE  360     78.896  18.348   8.487  1.00 43.69
ATOM  1553  CB  ILE  360     78.330  19.597   9.207  1.00 40.08
ATOM  1554  CG2 ILE  360     78.824  19.657  10.645  1.00 32.11
ATOM  1555  CG1 ILE  360     78.733  20.864   8.452  1.00 41.47
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ATOM	1556	CD1	ILE	360	78.057	22.115	8.954	1.00	44.93
ATOM	1557	C	ILE	360	78.452	17.101	9.242	1.00	43.63
ATOM	1558	O	ILE	360	77.257	16.797	9.313	1.00	45.20
ATOM	1559	N	PRO	361	79.413	16.337	9.780	1.00	43.91
ATOM	1560	CD	PRO	361	80.871	16.540	9.699	1.00	47.07
ATOM	1561	CA	PRO	361	79.087	15.118	10.526	1.00	41.66
ATOM	1562	CB	PRO	361	80.462	14.495	10.782	1.00	43.73
ATOM	1563	CG	PRO	361	81.383	15.679	10.830	1.00	45.45
ATOM	1564	C	PRO	361	78.332	15.403	11.832	1.00	36.42
ATOM	1565	O	PRO	361	78.679	16.325	12.572	1.00	35.74
ATOM	1566	N	HIS	362	77.291	14.610	12.088	1.00	33.14
ATOM	1567	CA	HIS	362	76.462	14.726	13.292	1.00	34.09
ATOM	1568	CB	HIS	362	77.288	14.413	14.547	1.00	33.82
ATOM	1569	CG	HIS	362	78.132	13.181	14.424	1.00	36.04
ATOM	1570	CD2	HIS	362	77.793	11.885	14.224	1.00	34.77
ATOM	1571	ND1	HIS	362	79.509	13.212	14.482	1.00	37.16
ATOM	1572	CE1	HIS	362	79.983	11.990	14.325	1.00	37.16
ATOM	1573	NE2	HIS	362	78.962	11.165	14.167	1.00	40.13
ATOM	1574	C	HIS	362	75.829	16.110	13.417	1.00	31.00
ATOM	1575	O	HIS	362	75.617	16.608	14.525	1.00	30.22
ATOM	1576	N	PHE	363	75.478	16.690	12.272	1.00	33.06
ATOM	1577	CA	PHE	363	74.878	18.021	12.200	1.00	28.08
ATOM	1578	CB	PHE	363	74.503	18.355	10.747	1.00	25.26
ATOM	1579	CG	PHE	363	73.923	19.733	10.567	1.00	24.91
ATOM	1580	CD1	PHE	363	74.750	20.817	10.320	1.00	27.60
ATOM	1581	CD2	PHE	363	72.552	19.948	10.664	1.00	25.52
ATOM	1582	CE1	PHE	363	74.221	22.100	10.175	1.00	29.70
ATOM	1583	CE2	PHE	363	72.014	21.227	10.522	1.00	25.88
ATOM	1584	CZ	PHE	363	72.850	22.304	10.278	1.00	21.49
ATOM	1585	C	PHE	363	73.659	18.201	13.099	1.00	23.79
ATOM	1586	O	PHE	363	73.587	19.164	13.863	1.00	24.48
ATOM	1587	N	TRP	364	72.707	17.277	13.012	1.00	23.13
ATOM	1588	CA	TRP	364	71.484	17.369	13.805	1.00	25.06
ATOM	1589	CB	TRP	364	70.536	16.201	13.494	1.00	21.17
ATOM	1590	CG	TRP	364	69.247	16.220	14.271	1.00	23.14
ATOM	1591	CD2	TRP	364	68.261	17.266	14.296	1.00	27.68
ATOM	1592	CE2	TRP	364	67.229	16.845	15.165	1.00	28.31
ATOM	1593	CE3	TRP	364	68.149	18.517	13.671	1.00	26.46
ATOM	1594	CD1	TRP	364	68.784	15.241	15.096	1.00	23.76
ATOM	1595	NE1	TRP	364	67.576	15.607	15.637	1.00	32.12
ATOM	1596	CZ2	TRP	364	66.100	17.628	15.427	1.00	25.63
ATOM	1597	CZ3	TRP	364	67.028	19.294	13.931	1.00	25.55
ATOM	1598	CH2	TRP	364	66.017	18.845	14.803	1.00	29.79
ATOM	1599	C	TRP	364	71.715	17.531	15.312	1.00	27.80
ATOM	1600	O	TRP	364	71.212	18.486	15.904	1.00	26.96
ATOM	1601	N	PRO	365	72.458	16.605	15.955	1.00	30.69
ATOM	1602	CD	PRO	365	72.974	15.308	15.481	1.00	31.45

ATOM	1603	CA	PRO	365	72.687	16.757	17.397	1.00 27.97
ATOM	1604	CB	PRO	365	73.506	15.512	17.752	1.00 26.50
ATOM	1605	CG	PRO	365	73.057	14.509	16.757	1.00 33.47
ATOM	1606	C	PRO	365	73.457	18.043	17.709	1.00 27.10
ATOM	1607	O	PRO	365	73.154	18.736	18.681	1.00 26.88
ATOM	1608	N	LYS	366	74.440	18.365	16.873	1.00 26.99
ATOM	1609	CA	LYS	366	75.230	19.577	17.061	1.00 30.69
ATOM	1610	CB	LYS	366	76.275	19.708	15.957	1.00 28.53
ATOM	1611	CG	LYS	366	77.481	18.804	16.106	1.00 28.89
ATOM	1612	CD	LYS	366	78.430	19.027	14.939	1.00 32.51
ATOM	1613	CE	LYS	366	79.743	18.294	15.116	1.00 38.52
ATOM	1614	NZ	LYS	366	80.632	18.506	13.939	1.00 45.28
ATOM	1615	C	LYS	366	74.349	20.831	17.079	1.00 36.18
ATOM	1616	O	LYS	366	74.472	21.672	17.972	1.00 39.82
ATOM	1617	N	LEU	367	73.464	20.950	16.091	1.00 37.54
ATOM	1618	CA	LEU	367	72.557	22.092	15.994	1.00 36.14
ATOM	1619	CB	LEU	367	71.803	22.070	14.659	1.00 32.20
ATOM	1620	CG	LEU	367	70.764	23.179	14.447	1.00 36.16
ATOM	1621	CD1	LEU	367	71.402	24.567	14.618	1.00 20.60
ATOM	1622	CD2	LEU	367	70.139	23.030	13.065	1.00 34.30
ATOM	1623	C	LEU	367	71.561	22.060	17.143	1.00 36.84
ATOM	1624	O	LEU	367	71.231	23.091	17.729	1.00 36.94
ATOM	1625	N	LEU	368	71.083	20.866	17.459	1.00 37.81
ATOM	1626	CA	LEU	368	70.130	20.683	18.536	1.00 34.83
ATOM	1627	CB	LEU	368	69.763	19.205	18.622	1.00 36.98
ATOM	1628	CG	LEU	368	68.421	18.777	19.205	1.00 40.34
ATOM	1629	CD1	LEU	368	67.276	19.595	18.619	1.00 36.28
ATOM	1630	CD2	LEU	368	68.241	17.299	18.908	1.00 39.39
ATOM	1631	C	LEU	368	70.755	21.182	19.843	1.00 38.32
ATOM	1632	O	LEU	368	70.059	21.711	20.707	1.00 41.87
ATOM	1633	N	MET	369	72.075	21.057	19.962	1.00 39.46
ATOM	1634	CA	MET	369	72.790	21.515	21.154	1.00 40.12
ATOM	1635	CB	MET	369	74.219	20.971	21.168	1.00 41.26
ATOM	1636	CG	MET	369	74.307	19.493	21.521	1.00 47.83
ATOM	1637	SD	MET	369	75.961	18.810	21.289	1.00 55.72
ATOM	1638	CE	MET	369	76.809	19.474	22.727	1.00 54.37
ATOM	1639	C	MET	369	72.805	23.039	21.251	1.00 42.81
ATOM	1640	O	MET	369	72.990	23.601	22.335	1.00 47.81
ATOM	1641	N	LYS	370	72.622	23.708	20.115	1.00 40.09
ATOM	1642	CA	LYS	370	72.588	25.165	20.080	1.00 33.65
ATOM	1643	CB	LYS	370	72.751	25.677	18.650	1.00 30.83
ATOM	1644	CG	LYS	370	74.138	25.435	18.078	1.00 30.98
ATOM	1645	CD	LYS	370	75.188	26.198	18.867	1.00 37.82
ATOM	1646	CE	LYS	370	76.591	25.938	18.351	1.00 36.05
ATOM	1647	NZ	LYS	370	77.034	24.562	18.667	1.00 48.68
ATOM	1648	C	LYS	370	71.293	25.684	20.702	1.00 33.32
ATOM	1649	O	LYS	370	71.218	26.842	21.112	1.00 34.75

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ATOM   1650  N   VAL   371    70.277  24.826  20.779  1.00 31.90
ATOM   1651  CA  VAL   371    69.006  25.197  21.395  1.00 31.77
ATOM   1652  CB  VAL   371    67.933  24.092  21.214  1.00 30.28
ATOM   1653  CG1 VAL   371    66.673  24.429  21.995  1.00 30.02
ATOM   1654  CG2 VAL   371    67.596  23.933  19.746  1.00 32.23
ATOM   1655  C-  VAL   371    69.277  25.417  22.885  1.00 34.44
ATOM   1656  O   VAL   371    68.722  26.331  23.499  1.00 33.35
ATOM   1657  N   THR   372    70.161  24.590  23.443  1.00 33.15
ATOM   1658  CA  THR   372    70.551  24.675  24.847  1.00 32.47
ATOM   1659  CB  THR   372    71.541  23.556  25.207  1.00 32.11
ATOM   1660  OG1 THR   372    70.955  22.288  24.891  1.00 35.33
ATOM   1661  CG2 THR   372    71.894  23.603  26.688  1.00 32.54
ATOM   1662  C   THR   372    71.226  26.020  25.108  1.00 34.49
ATOM   1663  O   THR   372    70.936  26.696  26.099  1.00 34.07
ATOM   1664  N   ASP   373    72.120  26.405  24.202  1.00 32.77
ATOM   1665  CA  ASP   373    72.830  27.671  24.315  1.00 28.08
ATOM   1666  CB  ASP   373    73.803  27.841  23.147  1.00 31.59
ATOM   1667  CG  ASP   373    74.910  26.789  23.142  1.00 37.29
ATOM   1668  OD1 ASP   373    75.170  26.169  24.196  1.00 40.82
ATOM   1669  OD2 ASP   373    75.531  26.586  22.079  1.00 40.81
ATOM   1670  C   ASP   373    71.830  28.821  24.353  1.00 29.21
ATOM   1671  O   ASP   373    71.931  29.709  25.200  1.00 31.85
ATOM   1672  N   LEU   374    70.843  28.775  23.463  1.00 24.71
ATOM   1673  CA  LEU   374    69.813  29.802  23.403  1.00 25.25
ATOM   1674  CB  LEU   374    68.906  29.587  22.188  1.00 25.61
ATOM   1675  CG  LEU   374    69.480  30.084  20.858  1.00 25.51
ATOM   1676  CD1 LEU   374    68.741  29.469  19.677  1.00 23.53
ATOM   1677  CD2 LEU   374    69.405  31.596  20.820  1.00 21.92
ATOM   1678  C   LEU   374    68.994  29.827  24.686  1.00 26.84
ATOM   1679  O   LEU   374    68.591  30.895  25.151  1.00 28.96
ATOM   1680  N   ARG   375    68.746  28.651  25.254  1.00 31.00
ATOM   1681  CA  ARG   375    67.996  28.554  26.502  1.00 32.86
ATOM   1682  CB  ARG   375    67.831  27.090  26.924  1.00 36.80
ATOM   1683  CG  ARG   375    66.861  26.297  26.071  1.00 44.91
ATOM   1684  CD  ARG   375    65.433  26.731  26.338  1.00 58.99
ATOM   1685  NE  ARG   375    64.501  26.210  25.342  1.00 72.26
ATOM   1686  CZ  ARG   375    63.909  25.020  25.404  1.00 77.46
ATOM   1687  NH1 ARG   375    64.147  24.201  26.422  1.00 80.94
ATOM   1688  NH2 ARG   375    63.062  24.657  24.447  1.00 75.58
ATOM   1689  C   ARG   375    68.771  29.317  27.570  1.00 32.27
ATOM   1690  O   ARG   375    68.199  30.125  28.304  1.00 33.75
ATOM   1691  N   MET   376    70.084  29.098  27.602  1.00 32.65
ATOM   1692  CA  MET   376    70.967  29.753  28.560  1.00 35.83
ATOM   1693  CB  MET   376    72.392  29.210  28.434  1.00 39.25
ATOM   1694  CG  MET   376    72.526  27.751  28.839  1.00 54.45
ATOM   1695  SD  MET   376    74.245  27.212  28.944  1.00 73.93
ATOM   1696  CE  MET   376    74.421  26.270  27.434  1.00 67.01
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ATOM    1697  C   MET   376    ·70.960  31.267  28.378  1.00 35.38
ATOM    1698  O   MET   376     70.882  32.015  29.353  1.00 34.73
ATOM    1699  N   ILE   377     71.038  31.716  27.129  1.00 32.51
ATOM    1700  CA  ILE   377     71.016  33.142  26.816  1.00 26.55
ATOM    1701  CB  ILE   377     71.182  33.370  25.299  1.00 24.84
ATOM    1702  CG2 ILE   377     70.817  34.797  24.923  1.00 26.63
ATOM    1703  CG1 ILE   377     72.616  33.038  24.890  1.00 20.66
ATOM    1704  CD1 ILE   377     72.872  33.104  23.409  1.00 20.74
ATOM    1705  C   ILE   377     69.706  33.755  27.313  1.00 25.47
ATOM    1706  O   ILE   377     69.696  34.848  27.881  1.00 29.99
ATOM    1707  N   GLY   378     68.608  33.033  27.127  1.00 25.11
ATOM    1708  CA  GLY   378     67.321  33.522  27.580  1.00 27.82
ATOM    1709  C   GLY   378     67.279  33.613  29.095  1.00 30.90
ATOM    1710  O   GLY   378     66.749  34.579  29.651  1.00 31.19
ATOM    1711  N   ALA   379     67.851  32.611  29.761  1.00 31.62
ATOM    1712  CA  ALA   379     67.896  32.547  31.223  1.00 30.74
ATOM    1713  CB  ALA   379     68.433  31.198  31.671  1.00 30.82
ATOM    1714  C   ALA   379     68.756  33.668  31.801  1.00 30.07
ATOM    1715  O   ALA   379     68.327  34.384  32.708  1.00 31.05
ATOM    1716  N   CYA   380     69.966  33.817  31.273  1.00 29.72
ATOM    1717  CA  CYA   380     70.873  34.866  31.723  1.00 33.36
ATOM    1718  CB  CYA   380     72.201  34.809  30.963  1.00 38.31
ATOM    1719  SG  CYA   380     73.249  33.407  31.386  1.00 50.99
ATOM    1720  AS  CYA   380     74.982  33.655  29.929  1.00 70.37
ATOM    1721  C   CYA   380     70.226  36.232  31.535  1.00 33.40
ATOM    1722  O   CYA   380     70.246  37.062  32.442  1.00 36.41
ATOM    1723  N   HIS   381     69.615  36.456  30.374  1.00 32.55
ATOM    1724  CA  HIS   381     68.965  37.734  30.114  1.00 26.41
ATOM    1725  CB  HIS   381     68.434  37.811  28.681  1.00 20.89
ATOM    1726  CG  HIS   381     67.593  39.023  28.423  1.00 15.78
ATOM    1727  CD2 HIS   381     67.928  40.277  28.041  1.00 12.67
ATOM    1728  ND1 HIS   381     66.226  39.031  28.605  1.00 17.88
ATOM    1729  CE1 HIS   381     65.756  40.239  28.353  1.00 16.27
ATOM    1730  NE2 HIS   381     66.768  41.013  28.008  1.00 17.18
ATOM    1731  C   HIS   381     67.839  38.023  31.102  1.00 26.73
ATOM    1732  O   HIS   381     67.621  39.176  31.464  1.00 30.46
ATOM    1733  N   ALA   382     67.111  36.991  31.521  1.00 26.68
ATOM    1734  CA  ALA   382     66.010  37.176  32.464  1.00 27.90
ATOM    1735  CB  ALA   382     65.237  35.878  32.642  1.00 25.29
ATOM    1736  C   ALA   382     66.511  37.697  33.810  1.00 31.23
ATOM    1737  O   ALA   382     65.927  38.617  34.378  1.00 37.67
ATOM    1738  N   SER   383     67.596  37.114  34.316  1.00 34.15
ATOM    1739  CA  SER   383     68.174  37.550  35.588  1.00 37.23
ATOM    1740  CB  SER   383     69.294  36.605  36.027  1.00 40.21
ATOM    1741  OG  SER   383     68.785  35.324  36.361  1.00 53.99
ATOM    1742  C   SER   383     68.727  38.958  35.417  1.00 33.67
ATOM    1743  O   SER   383     68.532  39.827  36.268  1.00 40.73
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ATOM   1744 N   ARG   384      69.411 39.171 34.298 1.00 29.95
ATOM   1745 CA  ARG   384      70.000 40.458 33.957 1.00 29.77
ATOM   1746 CB  ARG   384      70.684 40.350 32.594 1.00 30.79
ATOM   1747 CG  ARG   384      71.481 41.558 32.167 1.00 31.34
ATOM   1748 CD  ARG   384      72.781 41.638 32.918 1.00 33.62
ATOM   1749 NE  ARG   384      73.657 42.660 32.358 1.00 41.68
ATOM   1750 CZ  ARG   384      74.584 43.310 33.052 1.00 41.20
ATOM   1751 NH1 ARG   384      74.756 43.047 34.339 1.00 42.11
ATOM   1752 NH2 ARG   384      75.349 44.213 32.455 1.00 37.27
ATOM   1753 C   ARG   384      68.910 41.536 33.911 1.00 35.72
ATOM   1754 O   ARG   384      69.090 42.635 34.439 1.00 41.66
ATOM   1755 N   PHE   385      67.768 41.196 33.318 1.00 34.30
ATOM   1756 CA  PHE   385      66.646 42.119 33.199 1.00 32.40
ATOM   1757 CB  PHE   385      65.527 41.502 32.356 1.00 29.02
ATOM   1758 CG  PHE   385      64.344 42.407 32.163 1.00 26.56
ATOM   1759 CD1 PHE   385      64.317 43.320 31.119 1.00 26.59
ATOM   1760 CD2 PHE   385      63.263 42.355 33.037 1.00 24.69
ATOM   1761 CE1 PHE   385      63.231 44.173 30.947 1.00 31.70
ATOM   1762 CE2 PHE   385      62.174 43.202 32.875 1.00 26.79
ATOM   1763 CZ  PHE   385      62.158 44.115 31.827 1.00 31.59
ATOM   1764 C   PHE   385      66.121 42.492 34.578 1.00 32.98
ATOM   1765 O   PHE   385      65.822 43.659 34.839 1.00 33.91
ATOM   1766 N   LEU   386      66.003 41.499 35.456 1.00 33.91
ATOM   1767 CA  LEU   386      65.533 41.736 36.818 1.00 38.66
ATOM   1768 CB  LEU   386      65.547 40.440 37.633 1.00 43.79
ATOM   1769 CG  LEU   386      64.327 39.521 37.525 1.00 49.81
ATOM   1770 CD1 LEU   386      64.652 38.147 38.099 1.00 51.12
ATOM   1771 CD2 LEU   386      63.135 40.148 38.246 1.00 49.17
ATOM   1772 C   LEU   386      66.445 42.761 37.475 1.00 38.95
ATOM   1773 O   LEU   386      65.979 43.682 38.146 1.00 42.16
ATOM   1774 N   HIS   387      67.745 42.613 37.248 1.00 33.62
ATOM   1775 CA  HIS   387      68.723 43.531 37.808 1.00 39.73
ATOM   1776 CB  HIS   387      70.138 42.980 37.639 1.00 40.71
ATOM   1777 CG  HIS   387      70.403 41.749 38.449 1.00 52.03
ATOM   1778 CD2 HIS   387      69.573 40.967 39.181 1.00 53.85
ATOM   1779 ND1 HIS   387      71.657 41.189 38.566 1.00 54.79
ATOM   1780 CE1 HIS   387      71.590 40.114 39.334 1.00 56.55
ATOM   1781 NE2 HIS   387      70.336 39.958 39.720 1.00 57.48
ATOM   1782 C   HIS   387      68.594 44.913 37.175 1.00 42.08
ATOM   1783 O   HIS   387      68.712 45.926 37.865 1.00 44.12
ATOM   1784 N   MET   388      68.318 44.957 35.874 1.00 42.38
ATOM   1785 CA  MET   388      68.154 46.229 35.175 1.00 38.00
ATOM   1786 CB  MET   388      67.840 46.006 33.692 1.00 40.21
ATOM   1787 CG  MET   388      69.009 45.555 32.829 1.00 41.26
ATOM   1788 SD  MET   388      68.500 45.427 31.089 1.00 45.51
ATOM   1789 CE  MET   388      69.089 43.802 30.645 1.00 42.40
ATOM   1790 C   MET   388      67.025 47.044 35.810 1.00 38.11
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ATOM   1791  O   MET   388       67.155  48.255  35.997  1.00 38.41
ATOM   1792  N   LYS   389       65.926  46.374  36.144  1.00 39.67
ATOM   1793  CA  LYS   389       64.773  47.036  36.750  1.00 44.96
ATOM   1794  CB  LYS   389       63.570  46.087  36.818  1.00 49.52
ATOM   1795  CG  LYS   389       62.674  46.102  35.588  1.00 56.74
ATOM   1796  CD  LYS   389       62.145  47.509  35.278  1.00 68.05
ATOM   1797  CE  LYS   389       61.287  48.100  36.403  1.00 71.47
ATOM   1798  NZ  LYS   389       60.038  47.330  36.661  1.00 71.98
ATOM   1799  C   LYS   389       65.041  47.604  38.141  1.00 46.60
ATOM   1800  O   LYS   389       64.516  48.661  38.499  1.00 47.25
ATOM   1801  N   VAL   390       65.832  46.893  38.935  1.00 47.15
ATOM   1802  CA  VAL   390       66.129  47.353  40.284  1.00 50.75
ATOM   1803  CB  VAL   390       66.686  46.202  41.182  1.00 50.42
ATOM   1804  CG1 VAL   390       68.095  45.802  40.770  1.00 47.93
ATOM   1805  CG2 VAL   390       66.650  46.612  42.640  1.00 56.67
ATOM   1806  C   VAL   390       67.072  48.558  40.286  1.00 49.82
ATOM   1807  O   VAL   390       66.971  49.426  41.152  1.00 52.44
ATOM   1808  N   GLU   391       67.926  48.651  39.272  1.00 46.14
ATOM   1809  CA  GLU   391       68.888  49.741  39.173  1.00 43.84
ATOM   1810  CB  GLU   391       70.150  49.268  38.449  1.00 41.44
ATOM   1811  CG  GLU   391       70.837  48.074  39.095  1.00 51.12
ATOM   1812  CD  GLU   391       71.218  48.325  40.540  1.00 57.29
ATOM   1813  OE1 GLU   391       71.970  49.287  40.802  1.00 58.15
ATOM   1814  OE2 GLU   391       70.764  47.559  41.416  1.00 62.51
ATOM   1815  C   GLU   391       68.386  51.015  38.501  1.00 45.94
ATOM   1816  O   GLU   391       68.567  52.114  39.033  1.00 51.14
ATOM   1817  N   CYA   392       67.727  50.872  37.354  1.00 45.84
ATOM   1818  CA  CYA   392       67.255  52.029  36.598  1.00 41.60
ATOM   1819  CB  CYA   392       67.681  51.889  35.140  1.00 42.06
ATOM   1820  SG  CYA   392       69.452  52.008  34.968  1.00 44.47
ATOM   1821  AS  CYA   392       69.867  50.812  33.150  1.00 54.22
ATOM   1822  C   CYA   392       65.779  52.395  36.683  1.00 42.27
ATOM   1823  O   CYA   392       64.937  51.564  37.029  1.00 43.91
ATOM   1824  N   PRO   393       65.451  53.674  36.414  1.00 42.79
ATOM   1825  CD  PRO   393       66.384  54.774  36.106  1.00 38.59
ATOM   1826  CA  PRO   393       64.067  54.159  36.459  1.00 44.20
ATOM   1827  CB  PRO   393       64.218  55.667  36.238  1.00 39.88
ATOM   1828  CG  PRO   393       65.487  55.789  35.459  1.00 35.88
ATOM   1829  C   PRO   393       63.178  53.513  35.398  1.00 45.29
ATOM   1830  O   PRO   393       63.600  53.308  34.257  1.00 43.97
ATOM   1831  N   THR   394       61.935  53.238  35.782  1.00 48.20
ATOM   1832  CA  THR   394       60.959  52.607  34.901  1.00 53.71
ATOM   1833  CB  THR   394       59.605  52.429  35.629  1.00 59.59
ATOM   1834  OG1 THR   394       58.690  51.717  34.787  1.00 66.50
ATOM   1835  CG2 THR   394       59.013  53.787  36.004  1.00 61.00
ATOM   1836  C   THR   394       60.752  53.358  33.581  1.00 51.35
ATOM   1837  O   THR   394       60.419  52.751  32.563  1.00 54.39
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ATOM   1838  N   GLU   395      61.008  54.664  33.595  1.00 47.65
ATOM   1839  CA  GLU   395      60.845  55.509  32.414  1.00 44.43
ATOM   1840  CB  GLU   395      60.988  56.978  32.804  1.00 43.85
ATOM   1841  C   GLU   395      61.788  55.175  31.250  1.00 42.93
ATOM   1842  O   GLU   395      61.589  55.649  30.129  1.00 41.39
ATOM   1843  N   LEU   396      62.818  54.375  31.517  1.00 39.38
ATOM   1844  CA  LEU   396      63.782  53.989  30.486  1.00 35.70
ATOM   1845  CB  LEU   396      65.185  53.867  31.090  1.00 34.96
ATOM   1846  CG  LEU   396      65.854  55.141  31.609  1.00 36.47
ATOM   1847  CD1 LEU   396      67.234  54.807  32.150  1.00 34.21
ATOM   1848  CD2 LEU   396      65.959  56.164  30.491  1.00 32.74
ATOM   1849  C   LEU   396      63.407  52.671  29.803  1.00 34.60
ATOM   1850  O   LEU   396      64.086  52.223  28.873  1.00 30.36
ATOM   1851  N   PHE   397      62.325  52.059  30.269  1.00 33.02
ATOM   1852  CA  PHE   397      61.868  50.792  29.725  1.00 33.39
ATOM   1853  CB  PHE   397      61.615  49.782  30.852  1.00 34.30
ATOM   1854  CG  PHE   397      62.834  49.439  31.665  1.00 32.62
ATOM   1855  CD1 PHE   397      63.296  50.301  32.654  1.00 32.35
ATOM   1856  CD2 PHE   397      63.504  48.241  31.461  1.00 31.28
ATOM   1857  CE1 PHE   397      64.407  49.976  33.426  1.00 27.01
ATOM   1858  CE2 PHE   397      64.616  47.905  32.229  1.00 33.34
ATOM   1859  CZ  PHE   397      65.067  48.775  33.213  1.00 31.29
ATOM   1860  C   PHE   397      60.580  50.961  28.934  1.00 33.17
ATOM   1861  O   PHE   397      59.540  51.318  29.498  1.00 31.99
ATOM   1862  N   PRO   398      60.636  50.752  27.606  1.00 32.45
ATOM   1863  CD  PRO   398      61.821  50.493  26.768  1.00 28.15
ATOM   1864  CA  PRO   398      59.429  50.885  26.786  1.00 30.02
ATOM   1865  CB  PRO   398      59.921  50.483  25.394  1.00 28.15
ATOM   1866  CG  PRO   398      61.352  50.923  25.397  1.00 24.89
ATOM   1867  C   PRO   398      58.384  49.900  27.326  1.00 28.39
ATOM   1868  O   PRO   398      58.735  48.810  27.789  1.00 28.00
ATOM   1869  N   PRO   399      57.092  50.262  27.267  1.00 32.45
ATOM   1870  CD  PRO   399      56.577  51.511  26.672  1.00 34.93
ATOM   1871  CA  PRO   399      55.989  49.421  27.753  1.00 32.54
ATOM   1872  CB  PRO   399      54.755  50.122  27.188  1.00 34.47
ATOM   1873  CG  PRO   399      55.159  51.564  27.196  1.00 31.37
ATOM   1874  C   PRO   399      56.044  47.946  27.338  1.00 32.18
ATOM   1875  O   PRO   399      55.950  47.054  28.188  1.00 32.58
ATOM   1876  N   LEU   400      56.195  47.689  26.041  1.00 30.15
ATOM   1877  CA  LEU   400      56.259  46.314  25.541  1.00 32.32
ATOM   1878  CB  LEU   400      56.211  46.297  24.011  1.00 28.67
ATOM   1879  CG  LEU   400      56.028  44.927  23.351  1.00 28.77
ATOM   1880  CD1 LEU   400      54.802  44.234  23.919  1.00 22.73
ATOM   1881  CD2 LEU   400      55.897  45.096  21.846  1.00 27.89
ATOM   1882  C   LEU   400      57.496  45.561  26.051  1.00 32.27
ATOM   1883  O   LEU   400      57.437  44.358  26.307  1.00 32.87
ATOM   1884  N   PHE   401      58.602  46.279  26.215  1.00 32.27
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ATOM   1885  CA  PHE   401      59.847  45.695  26.710  1.00 32.39
ATOM   1886  CB  PHE   401      60.946  46.769  26.711  1.00 31.38
ATOM   1887  CG  PHE   401      62.290  46.286  27.194  1.00 35.12
ATOM   1888  CD1 PHE   401      62.835  45.089  26.729  1.00 34.68
ATOM   1889  CD2 PHE   401      63.030  47.051  28.097  1.00 34.57
ATOM   1890  CE1 PHE   401      64.100  44.662  27.155  1.00 30.27
ATOM   1891  CE2 PHE   401      64.291  46.635  28.526  1.00 33.57
ATOM   1892  CZ  PHE   401      64.828  45.438  28.054  1.00 35.74
ATOM   1893  C   PHE   401      59.599  45.169  28.129  1.00 32.21
ATOM   1894  O   PHE   401      60.002  44.056  28.478  1.00 33.36
ATOM   1895  N   LEU   402      58.902  45.967  28.929  1.00 31.85
ATOM   1896  CA  LEU   402      58.582  45.602  30.302  1.00 35.06
ATOM   1897  CB  LEU   402      57.948  46.789  31.029  1.00 34.76
ATOM   1898  CG  LEU   402      58.878  47.852  31.591  1.00 33.48
ATOM   1899  CD1 LEU   402      58.060  49.010  32.152  1.00 32.58
ATOM   1900  CD2 LEU   402      59.753  47.217  32.662  1.00 26.27
ATOM   1901  C   LEU   402      57.626  44.426  30.393  1.00 36.80
ATOM   1902  O   LEU   402      57.793  43.545  31.239  1.00 35.43
ATOM   1903  N   GLU   403      56.600  44.443  29.547  1.00 38.50
ATOM   1904  CA  GLU   403      55.581  43.401  29.540  1.00 40.24
ATOM   1905  CB  GLU   403      54.435  43.792  28.605  1.00 44.03
ATOM   1906  CG  GLU   403      53.239  42.850  28.666  1.00 55.53
ATOM   1907  CD  GLU   403      52.180  43.159  27.618  1.00 66.67
ATOM   1908  OE1 GLU   403      52.151  44.299  27.095  1.00 70.81
ATOM   1909  OE2 GLU   403      51.370  42.255  27.315  1.00 73.80
ATOM   1910  C   GLU   403      56.096  42.018  29.162  1.00 38.00
ATOM   1911  O   GLU   403      55.745  41.029  29.805  1.00 38.78
ATOM   1912  N   VAL   404      56.934  41.955  28.132  1.00 37.39
ATOM   1913  CA  VAL   404      57.475  40.686  27.652  1.00 37.05
ATOM   1914  CB  VAL   404      58.180  40.855  26.286  1.00 35.57
ATOM   1915  CG1 VAL   404      58.677  39.513  25.776  1.00 36.85
ATOM   1916  CG2 VAL   404      57.222  41.451  25.287  1.00 42.03
ATOM   1917  C   VAL   404      58.438  40.000  28.609  1.00 38.69
ATOM   1918  O   VAL   404      58.436  38.774  28.727  1.00 40.71
ATOM   1919  N   PHE   405      59.267  40.785  29.286  1.00 39.34
ATOM   1920  CA  PHE   405      60.250  40.221  30.198  1.00 39.33
ATOM   1921  CB  PHE   405      61.620  40.840  29.913  1.00 33.87
ATOM   1922  CG  PHE   405      62.107  40.609  28.509  1.00 32.17
ATOM   1923  CD1 PHE   405      62.355  41.683  27.660  1.00 31.34
ATOM   1924  CD2 PHE   405      62.315  39.317  28.032  1.00 31.98
ATOM   1925  CE1 PHE   405      62.801  41.476  26.352  1.00 30.79
ATOM   1926  CE2 PHE   405      62.759  39.099  26.730  1.00 26.06
ATOM   1927  CZ  PHE   405      63.004  40.182  25.889  1.00 27.98
ATOM   1928  C   PHE   405      59.905  40.322  31.682  1.00 42.64
ATOM   1929  O   PHE   405      60.785  40.188  32.534  1.00 45.10
ATOM   1930  N   GLU   406      58.630  40.536  31.988  1.00 48.95
ATOM   1931  CA  GLU   406      58.181  40.641  33.373  1.00 56.93
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ATOM	1932	CB	GLU	406	56.820	41.324	33.432	1.00	56.94
ATOM	1933	C	GLU	406	58.116	39.263	34.040	1.00	61.92
ATOM	1934	O	GLU	406	57.988	38.256	33.308	1.00	67.61
ATOM	1	O1	HOH	501	67.588	36.828	11.225	1.00	27.32
ATOM	2	O1	HOH	502	68.647	41.203	12.940	1.00	39.54
ATOM	3	O1·	HOH	503	64.072	40.115	12.407	1.00	32.47
ATOM	4	O1	HOH	504	62.312	39.659	16.075	1.00	17.39
ATOM	5	O1	HOH	505	63.449	46.468	15.530	1.00	30.46
ATOM	6	O1	HOH	506	67.191	15.561	-0.279	1.00	35.96
ATOM	7	O1	HOH	507	67.100	11.855	0.295	1.00	20.00
ATOM	8	O1	HOH	508	61.004	15.510	0.047	1.00	20.00
ATOM	9	O1	HOH	509	59.851	10.761	6.050	1.00	20.00
ATOM	10	O1	HOH	510	57.553	11.824	10.360	1.00	44.63
ATOM	11	O1	HOH	511	54.101	13.545	8.720	1.00	20.00
ATOM	12	O1	HOH	512	55.923	15.916	12.205	1.00	29.31
ATOM	13	O1	HOH	513	50.900	19.934	8.193	1.00	20.00
ATOM	14	O1	HOH	514	50.474	22.912	7.942	1.00	45.34
ATOM	15	O1	HOH	515	49.737	20.631	11.530	1.00	20.00
ATOM	16	O1	HOH	516	50.829	25.467	13.330	1.00	20.00
ATOM	17	O1	HOH	517	53.818	25.833	10.682	1.00	42.12
ATOM	18	O1	HOH	518	52.591	31.216	7.313	1.00	35.55
ATOM	19	O1	HOH	519	58.510	31.667	2.158	1.00	20.00
ATOM	20	O1	HOH	520	58.235	36.751	2.232	1.00	20.00
ATOM	21	O1	HOH	521	62.484	37.992	5.537	1.00	20.00
ATOM	22	O1	HOH	522	68.184	36.969	5.889	1.00	50.08
ATOM	23	O1	HOH	523	66.889	33.781	8.584	1.00	20.00
ATOM	24	O1	HOH	524	67.217	30.836	3.085	1.00	34.44
ATOM	25	O1	HOH	525	64.336	28.325	3.098	1.00	20.00
ATOM	26	O1	HOH	526	67.667	26.625	1.519	1.00	20.00
ATOM	27	O1	HOH	527	76.757	22.883	5.467	1.00	36.94
ATOM	28	O1	HOH	528	72.250	17.936	6.950	1.00	36.00
ATOM	29	O1	HOH	529	71.760	14.791	8.058	1.00	40.18
ATOM	30	O1	HOH	530	72.884	14.751	11.484	1.00	41.44
ATOM	31	O1	HOH	531	69.235	12.986	11.709	1.00	39.38
ATOM	32	O1	HOH	532	69.402	12.036	14.891	1.00	40.68
ATOM	33	O1	HOH	533	64.560	10.910	15.076	1.00	20.00
ATOM	34	O1	HOH	534	63.169	10.413	11.722	1.00	20.00
ATOM	35	O1	HOH	535	66.042	11.455	11.077	1.00	41.05
ATOM	36	O1	HOH	536	76.285	12.458	10.677	1.00	20.00
ATOM	37	O1	HOH	537	81.094	22.520	13.435	1.00	48.70
ATOM	38	O1	HOH	538	80.505	25.457	14.849	1.00	46.30
ATOM	39	O1	HOH	539	77.669	21.932	18.119	1.00	43.79
ATOM	40	O1	HOH	540	77.187	28.903	21.137	1.00	40.22
ATOM	41	O1	HOH	541	76.420	30.760	23.658	1.00	29.63
ATOM	42	O1	HOH	542	83.028	32.743	20.922	1.00	38.14
ATOM	43	O1	HOH	543	82.842	43.133	17.983	1.00	39.36
ATOM	44	O1	HOH	544	77.484	34.040	9.664	1.00	36.37

ATOM	45	O1	HOH	545	75.904	32.986	12.256	1.00	34.93
ATOM	46	O1	HOH	546	74.185	29.689	9.761	1.00	38.60
ATOM	47	O1	HOH	547	64.936	20.644	23.365	1.00	36.83
ATOM	48	O1	HOH	548	61.750	22.313	25.288	1.00	34.81
ATOM	49	O1	HOH	549	59.544	21.463	26.162	1.00	20.00
ATOM	50	O1	HOH	550	62.300	27.528	24.386	1.00	35.89
ATOM	51	O1	HOH	551	58.228	29.424	24.603	1.00	25.47
ATOM	52	O1	HOH	552	57.368	32.196	30.527	1.00	45.27
ATOM	53	O1	HOH	553	62.063	36.304	30.245	1.00	42.26
ATOM	54	O1	HOH	554	64.722	36.725	28.906	1.00	24.66
ATOM	55	O1	HOH	555	62.207	35.851	26.642	1.00	30.36
ATOM	56	O1	HOH	556	63.608	33.715	25.707	1.00	42.74
ATOM	57	O1	HOH	557	62.979	38.422	32.977	1.00	49.93
ATOM	58	O1	HOH	558	66.911	33.364	34.901	1.00	50.02
ATOM	59	O1	HOH	559	72.608	29.636	31.674	1.00	37.60
ATOM	60	O1	HOH	560	76.967	40.633	32.514	1.00	44.81
ATOM	61	O1	HOH	561	73.613	41.817	36.847	1.00	31.79
ATOM	62	O1	HOH	562	75.773	46.227	30.514	1.00	29.06
ATOM	63	O1	HOH	563	79.903	46.178	30.800	1.00	41.67
ATOM	64	O1	HOH	564	69.746	51.175	33.564	1.00	20.00
ATOM	65	O1	HOH	565	74.320	52.047	39.438	1.00	20.00
ATOM	66	O1	HOH	566	65.900	53.647	27.404	1.00	40.45
ATOM	67	O1	HOH	567	68.848	53.076	17.895	1.00	39.25
ATOM	68	O1	HOH	568	63.507	48.672	13.581	1.00	43.77
ATOM	69	O1	HOH	569	64.625	46.825	10.331	1.00	20.00
ATOM	70	O1	HOH	570	55.882	41.431	11.148	1.00	20.00
ATOM	71	O1	HOH	571	52.830	43.513	20.032	1.00	35.18
ATOM	72	O1	HOH	572	56.990	49.485	24.052	1.00	37.30
ATOM	73	O1	HOH	573	54.188	47.024	30.900	1.00	52.93
ATOM	74	O1	HOH	574	57.823	44.590	34.025	1.00	53.64
ATOM	75	O1	HOH	575	47.827	29.597	30.690	1.00	37.61
ATOM	76	O1	HOH	576	53.030	24.901	32.732	1.00	45.06
ATOM	77	O1	HOH	577	47.569	19.105	28.647	1.00	38.88
ATOM	78	O1	HOH	578	47.232	20.282	25.561	1.00	20.00
ATOM	79	O1	HOH	579	51.960	14.869	25.534	1.00	49.45
ATOM	80	O1	HOH	580	52.831	23.395	1.634	1.00	20.00
ATOM	81	O1	HOH	581	51.472	22.968	-0.900	1.00	25.10
ATOM	82	O1	HOH	582	77.238	52.503	8.906	1.00	47.05
END
ATOM	2004	C1	DMT	1	67.320	42.326	18.648	1.00	28.58
ATOM	2005	C2	DMT	1	68.927	43.263	23.318	1.00	29.26
ATOM	2006	C3	DMT	1	67.236	43.583	19.236	1.00	24.54
ATOM	2007	C4	DMT	1	69.268	44.313	24.111	1.00	28.48
ATOM	2008	C5	DMT	1	68.003	43.859	20.363	1.00	28.76
ATOM	2009	C6	DMT	1	68.654	44.389	25.458	1.00	28.16
ATOM	2010	C7	DMT	1	68.811	42.902	20.875	1.00	26.80
ATOM	2011	C8	DMT	1	67.803	43.410	25.793	1.00	29.83

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ATOM   2012  C9  DMT    1    68.921  41.665  20.324  1.00 26.77
ATOM   2013  C10 DMT    1    67.464  42.358  24.989  1.00 28.60
ATOM   2014  C11 DMT    1    68.165  41.349  19.185  1.00 25.29
ATOM   2015  C12 DMT    1    68.059  42.281  23.675  1.00 26.74
ATOM   2016  C13 DMT    1    66.475  42.038  17.456  1.00 21.51
ATOM   2017  C14 DMT    1    68.916  45.478  26.380  1.00 21.05
ATOM   2018  C15 DMT    1    66.989  40.910  16.417  1.00 22.84
ATOM   2019  C16 DMT    1    68.090  46.870  26.009  1.00 19.41
ATOM   2020  C17 DMT    1    65.982  40.730  15.243  1.00 27.07
ATOM   2021  C18 DMT    1    70.279  46.131  26.085  1.00 16.03
ATOM   2022  C19 DMT    1    67.903  45.249  20.974  1.00 19.56
ATOM   2023  C20 DMT    1    69.853  40.599  20.901  1.00  4.52
ATOM   2024  N1  DMT    1    68.280  41.070  16.042  1.00 17.57
ATOM   2025  O1  DMT    1    67.209  43.465  27.087  1.00 25.94
ATOM   2026  O2  DMT    1    69.547  43.191  22.015  1.00 30.23
ATOM   2027  O3  DMT    1    66.449  40.778  14.118  1.00 29.45
ATOM   2028  O4  DMT    1    64.820  40.564  15.546  1.00 26.46
END
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APPENDIX 4

TR_TRIAC.PDB

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REMARK
REMARK TR_triac full length numbering
REMARK Rfactor 0.236 Rfree 0.241
REMARK Resolution 25. 2.5 all reflections
REMARK
REMARK Three cacodylate-modified cysteines:
REMARK Cys334, Cys380, Cys392
REMARK modeled as free arsenic atoms
REMARK
REMARK conserved polar HOH numbered as in TR_t3.pdb
REMARK rearrangements start 600
REMARK
REMARK side chain of certain residues modeled as ALA due to poor density;
REMARK however, residue name reflects true residue for clarity
REMARK
REMARK clone obtained from Murray et. al.
REMARK deposited sequence confirmed,
REMARK differing from that reported by Thompson et. al.
REMARK in the following codons:
REMARK 281 Thr - Ala
REMARK 285 Lys - Glu
REMARK identical to that reported by Mitsuhashi et. al.
REMARK gb:RNTRAVI X07409
JRNL        AUTH   M.B. MURRAY, N.D.ZILZ, N.L.MCCREARY,M.J.MACDONALD
JRNL        AUTH 2 H.C.TOWLE
JRNL        TITL   ISOLATION AND CHARACTERIZATION OF RAT CDNA CLONES
FOR TWO
JRNL        TITL 2 DISTINCT THYROID HORMONE RECPTORS
JRNL        REF    JBC            V. 263 25  1988
JRNL        AUTH   C.C.THOMPSON, C.WEINBERGER, R.LEBO, R.M.EVANS
JRNL        TITL   IDENTIFICATION OF A NOVEL THYROID HORMONE RECEPTOR
EXPRESSED
JRNL        TITL 2 IN THE MAMMALIAN CENTRAL NERVOUS SYSTEM
JRNL        REF    SCIENCE        V. 237     1987
JRNL        AUTH   T.MITSUHASHI,G.TENNYSON,V.NIKODEM
JRNL        TITL   NUCLEOTIDE SEQUENCE OF NOVEL CDNAS GENERATED BY
ALTERNATIVE
JRNL        TITL 2 SPLICING OF A RAT THYROID HORMONE RECEPTOR GENE
TRANSCRIPT
JRNL        REF    NUC. ACIDS. RES.     V. 16 12  1988
REMARK
ATOM     1 CB  ARG   157    9.880 -24.199  7.196 1.00 57.79
ATOM     2 CG  ARG   157    11.380 -24.411  7.340 1.00 57.79
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ATOM	3	CD	ARG	157	11.960	-23.602	8.486	1.00	57.79
ATOM	4	NE	ARG	157	11.492	-24.098	9.778	1.00	57.79
ATOM	5	CZ	ARG	157	12.284	-24.379	10.809	1.00	57.79
ATOM	6	NH1	ARG	157	13.598	-24.212	10.714	1.00	57.79
ATOM	7	NH2	ARG	157	11.762	-24.854	11.932	1.00	57.79
ATOM	8	C	ARG	157	7.774	-24.838	5.974	1.00	38.50
ATOM	9	O	ARG	157	7.553	-24.416	4.840	1.00	57.79
ATOM	10	N	ARG	157	9.929	-25.500	5.089	1.00	38.50
ATOM	11	CA	ARG	157	9.183	-25.276	6.360	1.00	38.50
ATOM	12	N	PRO	158	6.802	-24.951	6.895	1.00	23.08
ATOM	13	CD	PRO	158	6.945	-25.424	8.282	1.00	28.38
ATOM	14	CA	PRO	158	5.415	-24.562	6.617	1.00	23.08
ATOM	15	CB	PRO	158	4.704	-24.824	7.948	1.00	28.38
ATOM	16	CG	PRO	158	5.801	-24.735	8.966	1.00	28.38
ATOM	17	C	PRO	158	5.210	-23.124	6.132	1.00	23.08
ATOM	18	O	PRO	158	5.678	-22.167	6.753	1.00	28.38
ATOM	19	N	GLU	159	4.504	-23.000	5.012	1.00	19.26
ATOM	20	CA	GLU	159	4.191	-21.717	4.389	1.00	19.26
ATOM	21	CB	GLU	159	4.022	-21.912	2.878	1.00	24.58
ATOM	22	CG	GLU	159	5.317	-22.009	2.086	1.00	24.58
ATOM	23	CD	GLU	159	5.849	-20.651	1.659	1.00	24.58
ATOM	24	OE1	GLU	159	5.034	-19.722	1.476	1.00	24.58
ATOM	25	OE2	GLU	159	7.080	-20.513	1.490	1.00	24.58
ATOM	26	C	GLU	159	2.879	-21.193	4.968	1.00	19.26
ATOM	27	O	GLU	159	2.152	-21.931	5.636	1.00	24.58
ATOM	28	N	PRO	160	2.579	-19.899	4.765	1.00	17.44
ATOM	29	CD	PRO	160	3.442	-18.817	4.259	1.00	13.94
ATOM	30	CA	PRO	160	1.323	-19.360	5.299	1.00	17.44
ATOM	31	CB	PRO	160	1.414	-17.872	4.956	1.00	13.94
ATOM	32	CG	PRO	160	2.880	-17.604	4.952	1.00	13.94
ATOM	33	C	PRO	160	0.098	-20.006	4.639	1.00	17.44
ATOM	34	O	PRO	160	0.067	-20.207	3.423	1.00	13.94
ATOM	35	N	THR	161	-0.895	-20.352	5.450	1.00	17.00
ATOM	36	CA	THR	161	-2.119	-20.957	4.941	1.00	17.00
ATOM	37	CB	THR	161	-2.958	-21.587	6.086	1.00	20.43
ATOM	38	OG1	THR	161	-3.441	-20.557	6.959	1.00	20.43
ATOM	39	CG2	THR	161	-2.121	-22.576	6.888	1.00	20.43
ATOM	40	C	THR	161	-2.929	-19.843	4.284	1.00	17.00
ATOM	41	O	THR	161	-2.691	-18.660	4.547	1.00	20.43
ATOM	42	N	PRO	162	-3.918	-20.200	3.449	1.00	12.94
ATOM	43	CD	PRO	162	-4.311	-21.559	3.038	1.00	17.56
ATOM	44	CA	PRO	162	-4.743	-19.190	2.780	1.00	12.94
ATOM	45	CB	PRO	162	-5.846	-20.029	2.143	1.00	17.56
ATOM	46	CG	PRO	162	-5.147	-21.303	1.816	1.00	17.56
ATOM	47	C	PRO	162	-5.317	-18.171	3.763	1.00	12.94
ATOM	48	O	PRO	162	-5.305	-16.964	3.503	1.00	17.56
ATOM	49	N	GLU	163	-5.790	-18.668	4.903	1.00	19.45

ATOM	50	CA	GLU	163	-6.374	-17.828	5.943	1.00	19.45
ATOM	51	CB	GLU	163	-6.994	-18.690	7.047	1.00	49.96
ATOM	52	CG	GLU	163	-8.178	-19.558	6.606	1.00	49.96
ATOM	53	CD	GLU	163	-7.782	-20.720	5.697	1.00	49.96
ATOM	54	OE1	GLU	163	-6.735	-21.361	5.951	1.00	49.96
ATOM	55	OE2	GLU	163	-8.527	-20.999	4.731	1.00	49.96
ATOM	56	C	GLU	163	-5.330	-16.897	6.548	1.00	19.45
ATOM	57	O	GLU	163	-5.614	-15.731	6.832	1.00	49.96
ATOM	58	N	GLU	164	-4.120	-17.417	6.734	1.00	22.03
ATOM	59	CA	GLU	164	-3.033	-16.634	7.305	1.00	22.03
ATOM	60	CB	GLU	164	-1.875	-17.541	7.725	1.00	17.15
ATOM	61	CG	GLU	164	-2.198	-18.414	8.937	1.00	17.15
ATOM	62	CD	GLU	164	-1.114	-19.434	9.249	1.00	17.15
ATOM	63	OE1	GLU	164	-0.283	-19.710	8.361	1.00	17.15
ATOM	64	OE2	GLU	164	-1.099	-19.968	10.379	1.00	17.15
ATOM	65	C	GLU	164	-2.559	-15.542	6.354	1.00	22.03
ATOM	66	O	GLU	164	-2.160	-14.470	6.802	1.00	17.15
ATOM	67	N	TRP	165	-2.607	-15.805	5.048	1.00	10.72
ATOM	68	CA	TRP	165	-2.205	-14.803	4.063	1.00	10.72
ATOM	69	CB	TRP	165	-2.223	-15.377	2.644	1.00	2.00
ATOM	70	CG	TRP	165	-0.928	-16.003	2.227	1.00	2.00
ATOM	71	CD2	TRP	165	0.350	-15.358	2.131	1.00	2.00
ATOM	72	CE2	TRP	165	1.275	-16.326	1.685	1.00	2.00
ATOM	73	CE3	TRP	165	0.804	-14.054	2.379	1.00	2.00
ATOM	74	CD1	TRP	165	-0.731	-17.298	1.848	1.00	2.00
ATOM	75	NE1	TRP	165	0.587	-17.500	1.521	1.00	2.00
ATOM	76	CZ2	TRP	165	2.627	-16.036	1.479	1.00	2.00
ATOM	77	CZ3	TRP	165	2.152	-13.764	2.174	1.00	2.00
ATOM	78	CH2	TRP	165	3.046	-14.754	1.729	1.00	2.00
ATOM	79	C	TRP	165	-3.137	-13.601	4.149	1.00	10.72
ATOM	80	O	TRP	165	-2.717	-12.463	3.925	1.00	2.00
ATOM	81	N	ASP	166	-4.408	-13.861	4.441	1.00	14.80
ATOM	82	CA	ASP	166	-5.397	-12.796	4.580	1.00	14.80
ATOM	83	CB	ASP	166	-6.812	-13.370	4.698	1.00	28.74
ATOM	84	CG	ASP	166	-7.298	-13.999	3.403	1.00	28.74
ATOM	85	OD1	ASP	166	-6.909	-13.511	2.320	1.00	28.74
ATOM	86	OD2	ASP	166	-8.071	-14.978	3.466	1.00	28.74
ATOM	87	C	ASP	166	-5.063	-11.981	5.819	1.00	14.80
ATOM	88	O	ASP	166	-5.056	-10.749	5.775	1.00	28.74
ATOM	89	N	LEU	167	-4.745	-12.682	6.906	1.00	11.01
ATOM	90	CA	LEU	167	-4.383	-12.044	8.166	1.00	11.01
ATOM	91	CB	LEU	167	-4.036	-13.103	9.214	1.00	31.53
ATOM	92	CG	LEU	167	-4.672	-12.975	10.601	1.00	31.53
ATOM	93	CD1	LEU	167	-3.806	-13.709	11.619	1.00	31.53
ATOM	94	CD2	LEU	167	-4.820	-11.507	10.989	1.00	31.53
ATOM	95	C	LEU	167	-3.161	-11.159	7.933	1.00	11.01
ATOM	96	O	LEU	167	-3.120	-10.006	8.367	1.00	31.53

ATOM	97	N	ILE	168	-2.180	-11.714	7.228	1.00	13.18
ATOM	98	CA	ILE	168	-0.937	-11.027	6.900	1.00	13.18
ATOM	99	CB	ILE	168	0.015	-11.968	6.113	1.00	18.30
ATOM	100	CG2	ILE	168	1.118	-11.182	5.414	1.00	18.30
ATOM	101	CG1	ILE	168	0.604	-13.013	7.063	1.00	18.30
ATOM	102	CD1	ILE	168	1.379	-14.111	6.373	1.00	18.30
ATOM	103	C	ILE	168	-1.185	-9.747	6.107	1.00	13.18
ATOM	104	O	ILE	168	-0.637	-8.697	6.437	1.00	18.30
ATOM	105	N	HIS	169	-2.032	-9.831	5.084	1.00	12.99
ATOM	106	CA	HIS	169	-2.342	-8.674	4.245	1.00	12.99
ATOM	107	CB	HIS	169	-3.218	-9.087	3.062	1.00	13.09
ATOM	108	CG	HIS	169	-2.553	-10.045	2.126	1.00	13.09
ATOM	109	CD2	HIS	169	-1.247	-10.223	1.811	1.00	13.09
ATOM	110	ND1	HIS	169	-3.249	-11.000	1.416	1.00	13.09
ATOM	111	CE1	HIS	169	-2.403	-11.728	0.710	1.00	13.09
ATOM	112	NE2	HIS	169	-1.181	-11.277	0.936	1.00	13.09
ATOM	113	C	HIS	169	-3.017	-7.550	5.017	1.00	12.99
ATOM	114	O	HIS	169	-2.680	-6.377	4.839	1.00	13.09
ATOM	115	N	VAL	170	-3.978	-7.909	5.862	1.00	13.36
ATOM	116	CA	VAL	170	-4.696	-6.926	6.664	1.00	13.36
ATOM	117	CB	VAL	170	-5.863	-7.572	7.443	1.00	20.12
ATOM	118	CG1	VAL	170	-6.541	-6.540	8.340	1.00	20.12
ATOM	119	CG2	VAL	170	-6.869	-8.165	6.471	1.00	20.12
ATOM	120	C	VAL	170	-3.741	-6.246	7.639	1.00	13.36
ATOM	121	O	VAL	170	-3.728	-5.019	7.744	1.00	20.12
ATOM	122	N	ALA	171	-2.920	-7.043	8.320	1.00	11.04
ATOM	123	CA	ALA	171	-1.953	-6.515	9.277	1.00	11.04
ATOM	124	CB	ALA	171	-1.249	-7.653	10.005	1.00	13.43
ATOM	125	C	ALA	171	-0.931	-5.613	8.588	1.00	11.04
ATOM	126	O	ALA	171	-0.658	-4.507	9.058	1.00	13.43
ATOM	127	N	THR	172	-0.382	-6.076	7.469	1.00	12.51
ATOM	128	CA	THR	172	0.606	-5.301	6.723	1.00	12.51
ATOM	129	CB	THR	172	1.062	-6.032	5.445	1.00	14.17
ATOM	130	OG1	THR	172	1.548	-7.338	5.782	1.00	14.17
ATOM	131	CG2	THR	172	2.175	-5.255	4.756	1.00	14.17
ATOM	132	C	THR	172	0.045	-3.936	6.337	1.00	12.51
ATOM	133	O	THR	172	0.701	-2.910	6.537	1.00	14.17
ATOM	134	N	GLU	173	-1.178	-3.921	5.815	1.00	17.79
ATOM	135	CA	GLU	173	-1.818	-2.675	5.421	1.00	17.79
ATOM	136	CB	GLU	173	-3.130	-2.946	4.682	1.00	49.44
ATOM	137	CG	GLU	173	-3.823	-1.679	4.171	1.00	49.44
ATOM	138	CD	GLU	173	-2.930	-0.835	3.266	1.00	49.44
ATOM	139	OE1	GLU	173	-2.075	-1.408	2.552	1.00	49.44
ATOM	140	OE2	GLU	173	-3.085	0.404	3.269	1.00	49.44
ATOM	141	C	GLU	173	-2.072	-1.780	6.628	1.00	17.79
ATOM	142	O	GLU	173	-1.854	-0.568	6.557	1.00	49.44
ATOM	143	N	ALA	174	-2.525	-2.375	7.731	1.00	13.12

ATOM	144	CA	ALA	174	-2.798	-1.631	8.957	1.00	13.12
ATOM	145	CB	ALA	174	-3.226	-2.576	10.068	1.00	17.51
ATOM	146	C	ALA	174	-1.556	-0.856	9.375	1.00	13.12
ATOM	147	O	ALA	174	-1.634	0.319	9.735	1.00	17.51
ATOM	148	N	HIS	175	-0.409	-1.521	9.317	1.00	12.20
ATOM	149	CA	HIS	175	0.851	-0.895	9.679	1.00	12.20
ATOM	150	CB	HIS	175	1.944	-1.949	9.886	1.00	17.52
ATOM	151	CG	HIS	175	3.302	-1.365	10.136	1.00	17.52
ATOM	152	CD2	HIS	175	3.733	-0.468	11.055	1.00	17.52
ATOM	153	ND1	HIS	175	4.400	-1.679	9.364	1.00	17.52
ATOM	154	CE1	HIS	175	5.447	-0.999	9.793	1.00	17.52
ATOM	155	NE2	HIS	175	5.070	-0.258	10.818	1.00	17.52
ATOM	156	C	HIS	175	1.311	0.133	8.654	1.00	12.20
ATOM	157	O	HIS	175	1.700	1.240	9.024	1.00	17.52
ATOM	158	N	ARG	176	1.291	-0.233	7.375	1.00	12.54
ATOM	159	CA	ARG	176	1.735	0.677	6.328	1.00	12.54
ATOM	160	CB	ARG	176	1.662	0.017	4.950	1.00	50.41
ATOM	161	CG	ARG	176	2.683	-1.088	4.730	1.00	50.41
ATOM	162	CD	ARG	176	2.666	-1.565	3.299	1.00	50.41
ATOM	163	NE	ARG	176	3.682	-2.571	2.989	1.00	50.41
ATOM	164	CZ	ARG	176	3.577	-3.472	2.012	1.00	50.41
ATOM	165	NH1	ARG	176	2.496	-3.513	1.236	1.00	50.41
ATOM	166	NH2	ARG	176	4.536	-4.376	1.841	1.00	50.41
ATOM	167	C	ARG	176	0.972	1.988	6.306	1.00	12.54
ATOM	168	O	ARG	176	1.561	3.040	6.087	1.00	50.41
ATOM	169	N	SER	177	-0.326	1.935	6.581	1.00	24.74
ATOM	170	CA	SER	177	-1.147	3.145	6.584	1.00	24.74
ATOM	171	CB	SER	177	-2.622	2.792	6.414	1.00	21.56
ATOM	172	OG	SER	177	-3.069	1.913	7.436	1.00	21.56
ATOM	173	C	SER	177	-0.960	4.013	7.832	1.00	24.74
ATOM	174	O	SER	177	-1.401	5.159	7.863	1.00	21.56
ATOM	175	N	THR	178	-0.347	3.453	8.870	1.00	17.96
ATOM	176	CA	THR	178	-0.104	4.181	10.115	1.00	17.96
ATOM	177	CB	THR	178	-0.736	3.440	11.323	1.00	19.76
ATOM	178	OG1	THR	178	-0.265	2.091	11.361	1.00	19.76
ATOM	179	CG2	THR	178	-2.253	3.443	11.211	1.00	19.76
ATOM	180	C	THR	178	1.376	4.395	10.382	1.00	17.96
ATOM	181	O	THR	178	1.760	4.880	11.445	1.00	19.76
ATOM	182	N	ASN	179	2.207	4.024	9.417	1.00	25.88
ATOM	183	CA	ASN	179	3.654	4.180	9.546	1.00	25.88
ATOM	184	CB	ASN	179	4.362	2.974	8.943	1.00	44.29
ATOM	185	CG	ASN	179	5.817	2.871	9.368	1.00	44.29
ATOM	186	OD1	ASN	179	6.129	2.768	10.564	1.00	44.29
ATOM	187	ND2	ASN	179	6.719	2.830	8.391	1.00	44.29
ATOM	188	C	ASN	179	4.078	5.458	8.823	1.00	25.88
ATOM	189	O	ASN	179	4.150	5.495	7.590	1.00	44.29
ATOM	190	N	ALA	180	4.332	6.502	9.604	1.00	45.20

ATOM	191	CA	ALA	180	4.740	7.818	9.126	1.00	45.20
ATOM	192	CB	ALA	180	5.026	8.743	10.313	1.00	36.14
ATOM	193	C	ALA	180	5.931	7.808	8.170	1.00	45.20
ATOM	194	O	ALA	180	6.918	7.097	8.372	1.00	36.14
ATOM	195	N	ALA	181	5.784	8.552	7.080	1.00	44.05
ATOM	196	CA	ALA	181	6.834	8.661	6.072	1.00	44.05
ATOM	197	CB	ALA	181	8.170	9.116	6.722	1.00	50.21
ATOM	198	C	ALA	181	7.069	7.427	5.196	1.00	44.05
ATOM	199	O	ALA	181	7.663	7.550	4.118	1.00	50.21
ATOM	200	N	GLY	182	6.567	6.268	5.622	1.00	39.06
ATOM	201	CA	GLY	182	6.756	5.040	4.867	1.00	39.06
ATOM	202	C	GLY	182	8.202	4.769	4.482	1.00	39.06
ATOM	203	O	GLY	182	9.096	4.785	5.334	1.00	48.58
ATOM	204	N	SER	183	8.438	4.564	3.189	1.00	64.55
ATOM	205	CA	SER	183	9.781	4.270	2.693	1.00	64.55
ATOM	206	CB	SER	183	9.690	3.402	1.430	1.00	67.68
ATOM	207	OG	SER	183	8.822	3.978	0.467	1.00	67.68
ATOM	208	C	SER	183	10.643	5.510	2.437	1.00	64.55
ATOM	209	O	SER	183	11.839	5.407	2.158	1.00	67.68
ATOM	210	N	HIS	184	10.035	6.683	2.579	1.00	52.73
ATOM	211	CA	HIS	184	10.725	7.953	2.352	1.00	52.73
ATOM	212	CB	HIS	184	9.772	8.955	1.698	1.00	44.77
ATOM	213	C	HIS	184	11.364	8.582	3.595	1.00	52.73
ATOM	214	O	HIS	184	11.837	9.722	3.540	1.00	44.77
ATOM	215	N	TRP	185	11.420	7.842	4.699	1.00	54.14
ATOM	216	CA	TRP	185	11.977	8.389	5.940	1.00	54.14
ATOM	217	CB	TRP	185	11.813	7.395	7.104	1.00	40.24
ATOM	218	CG	TRP	185	12.605	6.123	6.991	1.00	40.24
ATOM	219	CD2	TRP	185	13.894	5.873	7.551	1.00	40.24
ATOM	220	CE2	TRP	185	14.245	4.543	7.221	1.00	40.24
ATOM	221	CE3	TRP	185	14.791	6.641	8.300	1.00	40.24
ATOM	222	CD1	TRP	185	12.227	4.973	6.359	1.00	40.24
ATOM	223	NE1	TRP	185	13.210	4.015	6.496	1.00	40.24
ATOM	224	CZ2	TRP	185	15.461	3.968	7.619	1.00	40.24
ATOM	225	CZ3	TRP	185	15.996	6.073	8.696	1.00	40.24
ATOM	226	CH2	TRP	185	16.319	4.747	8.353	1.00	40.24
ATOM	227	C	TRP	185	13.432	8.870	5.819	1.00	54.14
ATOM	228	O	TRP	185	13.759	10.008	6.168	1.00	40.24
ATOM	229	N	LYS	186	14.277	8.032	5.232	1.00	43.72
ATOM	230	CA	LYS	186	15.694	8.329	5.035	1.00	43.72
ATOM	231	CB	LYS	186	16.353	7.168	4.282	1.00	64.14
ATOM	232	CG	LYS	186	17.830	7.355	3.945	1.00	64.14
ATOM	233	CD	LYS	186	18.758	7.175	5.139	1.00	64.14
ATOM	234	CE	LYS	186	20.195	7.060	4.652	1.00	64.14
ATOM	235	NZ	LYS	186	20.348	5.838	3.805	1.00	64.14
ATOM	236	C	LYS	186	15.900	9.634	4.263	1.00	43.72
ATOM	237	O	LYS	186	16.948	10.256	4.366	1.00	64.14

ATOM	238	N	GLN	187	14.892	10.032	3.491	1.00	58.06
ATOM	239	CA	GLN	187	14.958	11.244	2.682	1.00	58.06
ATOM	240	CB	GLN	187	14.288	10.997	1.321	1.00	74.68
ATOM	241	CG	GLN	187	14.639	9.662	0.667	1.00	74.68
ATOM	242	CD	GLN	187	16.133	9.397	0.607	1.00	74.68
ATOM	243	OE1	GLN	187	16.926	10.312	0.381	1.00	74.68
ATOM	244	NE2	GLN	187	16.528	8.156	0.855	1.00	74.68
ATOM	245	C	GLN	187	14.322	12.466	3.342	1.00	58.06
ATOM	246	O	GLN	187	14.897	13.551	3.358	1.00	74.68
ATOM	247	N	ARG	188	13.117	12.280	3.866	1.00	54.11
ATOM	248	CA	ARG	188	12.363	13.360	4.505	1.00	54.11
ATOM	249	CB	ARG	188	10.889	13.115	4.334	1.00	53.33
ATOM	250	C	ARG	188	12.654	13.626	5.977	1.00	54.11
ATOM	251	O	ARG	188	11.879	14.298	6.659	1.00	53.33
ATOM	252	N	ARG	189	13.754	13.090	6.473	1.00	39.52
ATOM	253	CA	ARG	189	14.089	13.271	7.875	1.00	39.52
ATOM	254	CB	ARG	189	14.594	11.959	8.482	1.00	60.85
ATOM	255	CG	ARG	189	15.969	11.555	7.991	1.00	60.85
ATOM	256	CD	ARG	189	16.442	10.298	8.693	1.00	60.85
ATOM	257	NE	ARG	189	17.833	9.963	8.385	1.00	60.85
ATOM	258	CZ	ARG	189	18.627	9.261	9.190	1.00	60.85
ATOM	259	NH1	ARG	189	18.178	8.805	10.356	1.00	60.85
ATOM	260	NH2	ARG	189	19.882	9.021	8.841	1.00	60.85
ATOM	261	C	ARG	189	15.109	14.378	8.109	1.00	39.52
ATOM	262	O	ARG	189	16.037	14.565	7.320	1.00	60.85
ATOM	263	N	LYS	190	14.934	15.100	9.212	1.00	44.13
ATOM	264	CA	LYS	190	15.834	16.183	9.586	1.00	44.13
ATOM	265	CB	LYS	190	15.068	17.500	9.680	1.00	45.33
ATOM	266	C	LYS	190	16.472	15.846	10.928	1.00	44.13
ATOM	267	O	LYS	190	15.827	15.272	11.805	1.00	45.33
ATOM	268	N	PHE	191	17.748	16.184	11.067	1.00	35.64
ATOM	269	CA	PHE	191	18.489	15.928	12.291	1.00	35.64
ATOM	270	CB	PHE	191	19.993	16.008	12.025	1.00	53.94
ATOM	271	CG	PHE	191	20.550	14.827	11.286	1.00	53.94
ATOM	272	CD1	PHE	191	20.209	14.596	9.958	1.00	53.94
ATOM	273	CD2	PHE	191	21.430	13.949	11.915	1.00	53.94
ATOM	274	CE1	PHE	191	20.735	13.510	9.265	1.00	53.94
ATOM	275	CE2	PHE	191	21.964	12.859	11.230	1.00	53.94
ATOM	276	CZ	PHE	191	21.615	12.639	9.900	1.00	53.94
ATOM	277	C	PHE	191	18.135	16.928	13.384	1.00	35.64
ATOM	278	O	PHE	191	17.997	18.127	13.120	1.00	53.94
ATOM	279	N	LEU	192	17.978	16.439	14.610	1.00	44.53
ATOM	280	CA	LEU	192	17.683	17.315	15.736	1.00	44.53
ATOM	281	CB	LEU	192	17.326	16.493	16.980	1.00	22.94
ATOM	282	CG	LEU	192	16.931	17.259	18.246	1.00	22.94
ATOM	283	CD1	LEU	192	15.568	17.906	18.064	1.00	22.94
ATOM	284	CD2	LEU	192	16.909	16.308	19.427	1.00	22.94

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ATOM   285  C   LEU  192    18.974 18.101 15.980 1.00 44.53
ATOM   286  O   LEU  192    20.049 17.507 16.129 1.00 22.94
ATOM   287  N   PRO  193    18.895 19.444 15.977 1.00 34.26
ATOM   288  CD  PRO  193    17.670 20.241 15.781 1.00 46.23
ATOM   289  CA  PRO  193    20.058 20.311 16.198 1.00 34.26
ATOM   290  CB  PRO  193    19.417 21.670 16.465 1.00 46.23
ATOM   291  CG  PRO  193    18.213 21.641 15.579 1.00 46.23
ATOM   292  C   PRO  193    20.917 19.844 17.372 1.00 34.26
ATOM   293  O   PRO  193    20.413 19.614 18.471 1.00 46.23
ATOM   294  N   ASP  194    22.217 19.716 17.125 1.00 42.67
ATOM   295  CA  ASP  194    23.174 19.254 18.128 1.00 42.67
ATOM   296  CB  ASP  194    24.583 19.226 17.536 1.00 68.50
ATOM   297  CG  ASP  194    24.731 18.185 16.450 1.00 68.50
ATOM   298  OD1 ASP  194    25.066 17.027 16.782 1.00 68.50
ATOM   299  OD2 ASP  194    24.498 18.518 15.269 1.00 68.50
ATOM   300  C   ASP  194    23.187 20.003 19.457 1.00 42.67
ATOM   301  O   ASP  194    23.545 19.432 20.486 1.00 68.50
ATOM   302  N   ASP  195    22.817 21.280 19.438 1.00 47.52
ATOM   303  CA  ASP  195    22.793 22.070 20.666 1.00 47.52
ATOM   304  CB  ASP  195    22.586 23.559 20.351 1.00 85.02
ATOM   305  CG  ASP  195    21.327 23.824 19.537 1.00 85.02
ATOM   306  OD1 ASP  195    20.291 24.188 20.138 1.00 85.02
ATOM   307  OD2 ASP  195    21.377 23.683 18.294 1.00 85.02
ATOM   308  C   ASP  195    21.715 21.561 21.627 1.00 47.52
ATOM   309  O   ASP  195    21.762 21.826 22.831 1.00 85.02
ATOM   310  N   ILE  196    20.760 20.810 21.089 1.00 44.54
ATOM   311  CA  ILE  196    19.663 20.259 21.875 1.00 44.54
ATOM   312  CB  ILE  196    18.379 20.137 21.023 1.00 39.66
ATOM   313  CG2 ILE  196    17.223 19.627 21.874 1.00 39.66
ATOM   314  CG1 ILE  196    18.031 21.496 20.407 1.00 39.66
ATOM   315  CD1 ILE  196    16.816 21.475 19.503 1.00 39.66
ATOM   316  C   ILE  196    20.030 18.882 22.420 1.00 44.54
ATOM   317  O   ILE  196    20.582 18.046 21.705 1.00 39.66
ATOM   318  N   GLY  197    19.714 18.652 23.690 1.00 42.85
ATOM   319  CA  GLY  197    20.006 17.372 24.307 1.00 42.85
ATOM   320  C   GLY  197    21.371 17.285 24.956 1.00 42.85
ATOM   321  O   GLY  197    21.815 16.198 25.318 1.00 40.22
ATOM   322  N   GLN  198    22.029 18.425 25.137 1.00 53.07
ATOM   323  CA  GLN  198    23.351 18.444 25.754 1.00 53.07
ATOM   324  CB  GLN  198    24.357 19.103 24.810 1.00 44.23
ATOM   325  C   GLN  198    23.344 19.153 27.110 1.00 53.07
ATOM   326  O   GLN  198    24.396 19.545 27.616 1.00 44.23
ATOM   327  N   SER  199    22.170 19.244 27.729 1.00 35.30
ATOM   328  CA  SER  199    22.037 19.918 29.019 1.00 35.30
ATOM   329  CB  SER  199    21.472 21.328 28.806 1.00 58.72
ATOM   330  OG  SER  199    22.093 21.971 27.704 1.00 58.72
ATOM   331  C   SER  199    21.168 19.169 30.036 1.00 35.30
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ATOM	332	O	SER	199	20.135	19.681	30.482	1.00	58.72
ATOM	333	N	PRO	200	21.544	17.928	30.387	1.00	34.70
ATOM	334	CD	PRO	200	22.656	17.108	29.872	1.00	38.71
ATOM	335	CA	PRO	200	20.740	17.184	31.362	1.00	34.70
ATOM	336	CB	PRO	200	21.311	15.769	31.266	1.00	38.71
ATOM	337	CG	PRO	200	22.737	15.992	30.878	1.00	38.71
ATOM	338	C	PRO	200	20.923	17.784	32.759	1.00	34.70
ATOM	339	O	PRO	200	22.006	17.692	33.341	1.00	38.71
ATOM	340	N	ILE	201	19.876	18.413	33.286	1.00	42.94
ATOM	341	CA	ILE	201	19.961	19.041	34.604	1.00	42.94
ATOM	342	CB	ILE	201	20.059	20.582	34.491	1.00	51.32
ATOM	343	CG2	ILE	201	21.468	20.991	34.078	1.00	51.32
ATOM	344	CG1	ILE	201	19.009	21.111	33.510	1.00	51.32
ATOM	345	CD1	ILE	201	19.169	22.582	33.164	1.00	51.32
ATOM	346	C	ILE	201	18.871	18.676	35.610	1.00	42.94
ATOM	347	O	ILE	201	19.049	18.875	36.814	1.00	51.32
ATOM	348	N	VAL	202	17.737	18.172	35.133	1.00	50.33
ATOM	349	CA	VAL	202	16.661	17.787	36.043	1.00	50.33
ATOM	350	CB	VAL	202	15.296	17.722	35.326	1.00	36.59
ATOM	351	CG1	VAL	202	14.202	17.311	36.304	1.00	36.59
ATOM	352	CG2	VAL	202	14.968	19.074	34.714	1.00	36.59
ATOM	353	C	VAL	202	17.007	16.435	36.665	1.00	50.33
ATOM	354	O	VAL	202	17.335	15.481	35.955	1.00	36.59
ATOM	355	N	SER	203	16.960	16.375	37.991	1.00	49.46
ATOM	356	CA	SER	203	17.289	15.166	38.736	1.00	49.46
ATOM	357	CB	SER	203	17.298	15.467	40.241	1.00	64.20
ATOM	358	OG	SER	203	17.673	14.330	41.003	1.00	64.20
ATOM	359	C	SER	203	16.356	13.992	38.463	1.00	49.46
ATOM	360	O	SER	203	15.147	14.166	38.310	1.00	64.20
ATOM	361	N	MET	204	16.944	12.800	38.419	1.00	41.99
ATOM	362	CA	MET	204	16.223	11.551	38.205	1.00	41.99
ATOM	363	CB	MET	204	16.320	11.096	36.746	1.00	48.64
ATOM	364	CG	MET	204	15.470	11.895	35.771	1.00	48.64
ATOM	365	SD	MET	204	13.702	11.783	36.114	1.00	48.64
ATOM	366	CE	MET	204	13.284	10.257	35.264	1.00	48.64
ATOM	367	C	MET	204	16.900	10.528	39.109	1.00	41.99
ATOM	368	O	MET	204	18.127	10.417	39.121	1.00	48.64
ATOM	369	N	PRO	205	16.108	9.754	39.869	1.00	38.42
ATOM	370	CD	PRO	205	14.633	9.815	39.866	1.00	52.20
ATOM	371	CA	PRO	205	16.586	8.724	40.797	1.00	38.42
ATOM	372	CB	PRO	205	15.334	7.888	41.041	1.00	52.20
ATOM	373	CG	PRO	205	14.254	8.919	41.028	1.00	52.20
ATOM	374	C	PRO	205	17.769	7.858	40.340	1.00	38.42
ATOM	375	O	PRO	205	18.724	7.675	41.092	1.00	52.20
ATOM	376	N	ASP	206	17.720	7.349	39.111	1.00	49.06
ATOM	377	CA	ASP	206	18.791	6.490	38.601	1.00	49.06
ATOM	378	CB	ASP	206	18.282	5.627	37.437	1.00	74.42

ATOM	379	CG	ASP	206	17.690	6.450	36.305	1.00	74.42
ATOM	380	OD1	ASP	206	18.397	7.335	35.770	1.00	74.42
ATOM	381	OD2	ASP	206	16.516	6.199	35.948	1.00	74.42
ATOM	382	C	ASP	206	20.106	7.177	38.214	1.00	49.06
ATOM	383	O	ASP	206	21.069	6.506	37.838	1.00	74.42
ATOM	384	N	GLY	207	20.139	8.505	38.272	1.00	42.48
ATOM	385	CA	GLY	207	21.355	9.225	37.928	1.00	42.48
ATOM	386	C	GLY	207	21.330	9.965	36.601	1.00	42.48
ATOM	387	O	GLY	207	21.890	11.058	36.494	1.00	42.50
ATOM	388	N	ASP	208	20.725	9.365	35.581	1.00	46.70
ATOM	389	CA	ASP	208	20.636	9.999	34.266	1.00	46.70
ATOM	390	CB	ASP	208	20.162	8.994	33.212	1.00	61.56
ATOM	391	CG	ASP	208	21.143	7.856	33.006	1.00	61.56
ATOM	392	OD1	ASP	208	20.723	6.684	33.122	1.00	61.56
ATOM	393	OD2	ASP	208	22.330	8.134	32.724	1.00	61.56
ATOM	394	C	ASP	208	19.666	11.176	34.339	1.00	46.70
ATOM	395	O	ASP	208	18.462	10.983	34.506	1.00	61.56
ATOM	396	N	LYS	209	20.200	12.389	34.238	1.00	41.30
ATOM	397	CA	LYS	209	19.389	13.602	34.308	1.00	41.30
ATOM	398	CB	LYS	209	20.254	14.782	34.732	1.00	41.38
ATOM	399	C	LYS	209	18.657	13.916	33.004	1.00	41.30
ATOM	400	O	LYS	209	19.052	13.458	31.930	1.00	41.38
ATOM	401	N	VAL	210	17.603	14.723	33.109	1.00	43.36
ATOM	402	CA	VAL	210	16.792	15.107	31.954	1.00	43.36
ATOM	403	CB	VAL	210	15.275	15.014	32.282	1.00	30.23
ATOM	404	CG1	VAL	210	14.440	15.358	31.055	1.00	30.23
ATOM	405	CG2	VAL	210	14.923	13.624	32.782	1.00	30.23
ATOM	406	C	VAL	210	17.088	16.522	31.442	1.00	43.36
ATOM	407	O	VAL	210	17.395	17.430	32.221	1.00	30.23
ATOM	408	N	ASP	211	17.004	16.685	30.125	1.00	27.49
ATOM	409	CA	ASP	211	17.217	17.966	29.458	1.00	27.49
ATOM	410	CB	ASP	211	18.073	17.765	28.198	1.00	30.75
ATOM	411	CG	ASP	211	18.360	19.068	27.447	1.00	30.75
ATOM	412	OD1	ASP	211	19.473	19.196	26.900	1.00	30.75
ATOM	413	OD2	ASP	211	17.484	19.955	27.370	1.00	30.75
ATOM	414	C	ASP	211	15.819	18.445	29.073	1.00	27.49
ATOM	415	O	ASP	211	15.197	17.892	28.166	1.00	30.75
ATOM	416	N	LEU	212	15.343	19.488	29.745	1.00	31.99
ATOM	417	CA	LEU	212	14.013	20.042	29.492	1.00	31.99
ATOM	418	CB	LEU	212	13.778	21.274	30.369	1.00	35.19
ATOM	419	CG	LEU	212	13.606	20.997	31.864	1.00	35.19
ATOM	420	CD1	LEU	212	13.621	22.298	32.652	1.00	35.19
ATOM	421	CD2	LEU	212	12.309	20.237	32.098	1.00	35.19
ATOM	422	C	LEU	212	13.713	20.377	28.032	1.00	31.99
ATOM	423	O	LEU	212	12.625	20.083	27.539	1.00	35.19
ATOM	424	N	GLU	213	14.672	20.981	27.338	1.00	28.70
ATOM	425	CA	GLU	213	14.468	21.345	25.940	1.00	28.70

ATOM	426	CB	GLU	213	15.623	22.209	25.428	1.00	62.21
ATOM	427	CG	GLU	213	15.434	22.707	23.997	1.00	62.21
ATOM	428	CD	GLU	213	16.651	23.440	23.446	1.00	62.21
ATOM	429	OE1	GLU	213	17.778	23.214	23.945	1.00	62.21
ATOM	430	OE2	GLU	213	16.478	24.237	22.498	1.00	62.21
ATOM	431	C	GLU	213	14.317	20.104	25.067	1.00	28.70
ATOM	432	O	GLU	213	13.403	20.024	24.247	1.00	62.21
ATOM	433	N	ALA	214	15.201	19.130	25.262	1.00	28.17
ATOM	434	CA	ALA	214	15.162	17.890	24.494	1.00	28.17
ATOM	435	CB	ALA	214	16.330	16.998	24.872	1.00	42.74
ATOM	436	C	ALA	214	13.844	17.176	24.759	1.00	28.17
ATOM	437	O	ALA	214	13.174	16.726	23.829	1.00	42.74
ATOM	438	N	PHE	215	13.468	17.104	26.032	1.00	21.66
ATOM	439	CA	PHE	215	12.222	16.471	26.444	1.00	21.66
ATOM	440	CB	PHE	215	12.033	16.628	27.958	1.00	28.76
ATOM	441	CG	PHE	215	10.751	16.038	28.481	1.00	28.76
ATOM	442	CD1	PHE	215	10.675	14.689	28.815	1.00	28.76
ATOM	443	CD2	PHE	215	9.623	16.835	28.653	1.00	28.76
ATOM	444	CE1	PHE	215	9.493	14.143	29.315	1.00	28.76
ATOM	445	CE2	PHE	215	8.438	16.300	29.150	1.00	28.76
ATOM	446	CZ	PHE	215	8.373	14.951	29.482	1.00	28.76
ATOM	447	C	PHE	215	11.068	17.132	25.696	1.00	21.66
ATOM	448	O	PHE	215	10.215	16.451	25.122	1.00	28.76
ATOM	449	N	SER	216	11.073	18.462	25.680	1.00	28.03
ATOM	450	CA	SER	216	10.043	19.242	25.007	1.00	28.03
ATOM	451	CB	SER	216	10.349	20.734	25.146	1.00	33.85
ATOM	452	OG	SER	216	9.300	21.529	24.624	1.00	33.85
ATOM	453	C	SER	216	9.945	18.857	23.532	1.00	28.03
ATOM	454	O	SER	216	8.852	18.613	23.019	1.00	33.85
ATOM	455	N	GLU	217	11.092	18.761	22.868	1.00	28.84
ATOM	456	CA	GLU	217	11.138	18.402	21.454	1.00	28.84
ATOM	457	CB	GLU	217	12.581	18.420	20.943	1.00	47.68
ATOM	458	CG	GLU	217	13.174	19.815	20.811	1.00	47.68
ATOM	459	CD	GLU	217	12.405	20.684	19.829	1.00	47.68
ATOM	460	OE1	GLU	217	11.660	21.581	20.281	1.00	47.68
ATOM	461	OE2	GLU	217	12.542	20.465	18.606	1.00	47.68
ATOM	462	C	GLU	217	10.505	17.044	21.179	1.00	28.84
ATOM	463	O	GLU	217	9.751	16.886	20.217	1.00	47.68
ATOM	464	N	PHE	218	10.799	16.071	22.036	1.00	21.49
ATOM	465	CA	PHE	218	10.259	14.725	21.883	1.00	21.49
ATOM	466	CB	PHE	218	11.020	13.746	22.781	1.00	24.12
ATOM	467	CG	PHE	218	12.489	13.652	22.464	1.00	24.12
ATOM	468	CD1	PHE	218	13.431	13.554	23.481	1.00	24.12
ATOM	469	CD2	PHE	218	12.932	13.677	21.144	1.00	24.12
ATOM	470	CE1	PHE	218	14.793	13.484	23.187	1.00	24.12
ATOM	471	CE2	PHE	218	14.290	13.607	20.843	1.00	24.12
ATOM	472	CZ	PHE	218	15.221	13.511	21.867	1.00	24.12

ATOM	473	C	PHE	218	8.765	14.675	22.176	1.00	21.49
ATOM	474	O	PHE	218	7.985	14.166	21.369	1.00	24.12
ATOM	475	N	THR	219	8.358	15.227	23.312	1.00	20.07
ATOM	476	CA	THR	219	6.949	15.231	23.685	1.00	20.07
ATOM	477	CB	THR	219	6.741	15.766	25.118	1.00	28.98
ATOM	478	OG1	THR	219	7.418	17.021	25.274	1.00	28.98
ATOM	479	CG2	THR	219	7.275	14.767	26.132	1.00	28.98
ATOM	480	C	THR	219	6.080	16.011	22.696	1.00	20.07
ATOM	481	O	THR	219	4.914	15.670	22.482	1.00	28.98
ATOM	482	N	LYS	220	6.662	17.022	22.060	1.00	25.35
ATOM	483	CA	LYS	220	5.943	17.840	21.088	1.00	25.35
ATOM	484	CB	LYS	220	6.842	18.965	20.577	1.00	29.07
ATOM	485	C	LYS	220	5.414	17.015	19.916	1.00	25.35
ATOM	486	O	LYS	220	4.376	17.343	19.339	1.00	29.07
ATOM	487	N	ILE	221	6.122	15.943	19.569	1.00	31.43
ATOM	488	CA	ILE	221	5.708	15.089	18.458	1.00	31.43
ATOM	489	CB	ILE	221	6.842	14.915	17.413	1.00	25.19
ATOM	490	CG2	ILE	221	7.240	16.264	16.838	1.00	25.19
ATOM	491	CG1	ILE	221	8.050	14.215	18.043	1.00	25.19
ATOM	492	CD1	ILE	221	9.113	13.799	17.044	1.00	25.19
ATOM	493	C	ILE	221	5.240	13.700	18.892	1.00	31.43
ATOM	494	O	ILE	221	4.930	12.857	18.046	1.00	25.19
ATOM	495	N	ILE	222	5.129	13.474	20.198	1.00	24.41
ATOM	496	CA	ILE	222	4.720	12.162	20.687	1.00	24.41
ATOM	497	CB	ILE	222	5.189	11.916	22.147	1.00	27.10
ATOM	498	CG2	ILE	222	4.221	12.545	23.145	1.00	27.10
ATOM	499	CG1	ILE	222	5.302	10.410	22.400	1.00	27.10
ATOM	500	CD1	ILE	222	6.062	10.053	23.646	1.00	27.10
ATOM	501	C	ILE	222	3.231	11.845	20.541	1.00	24.41
ATOM	502	O	ILE	222	2.864	10.691	20.307	1.00	27.10
ATOM	503	N	THR	223	2.378	12.861	20.642	1.00	33.16
ATOM	504	CA	THR	223	0.936	12.653	20.520	1.00	33.16
ATOM	505	CB	THR	223	0.150	13.974	20.721	1.00	36.84
ATOM	506	OG1	THR	223	0.352	14.442	22.063	1.00	36.84
ATOM	507	CG2	THR	223	-1.346	13.764	20.484	1.00	36.84
ATOM	508	C	THR	223	0.536	11.954	19.212	1.00	33.16
ATOM	509	O	THR	223	-0.156	10.932	19.242	1.00	36.84
ATOM	510	N	PRO	224	0.968	12.482	18.048	1.00	18.75
ATOM	511	CD	PRO	224	1.691	13.735	17.770	1.00	26.12
ATOM	512	CA	PRO	224	0.590	11.805	16.802	1.00	18.75
ATOM	513	CB	PRO	224	1.117	12.747	15.715	1.00	26.12
ATOM	514	CG	PRO	224	2.221	13.497	16.386	1.00	26.12
ATOM	515	C	PRO	224	1.200	10.402	16.701	1.00	18.75
ATOM	516	O	PRO	224	0.606	9.502	16.101	1.00	26.12
ATOM	517	N	ALA	225	2.368	10.213	17.312	1.00	12.19
ATOM	518	CA	ALA	225	3.040	8.916	17.300	1.00	12.19
ATOM	519	CB	ALA	225	4.415	9.021	17.943	1.00	20.39

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ATOM    520  C   ALA   225     2.187   7.881  18.030  1.00 12.19
ATOM    521  O   ALA   225     1.998   6.764  17.545  1.00 20.39
ATOM    522  N   ILE   226     1.645   8.271  19.179  1.00 14.61
ATOM    523  CA  ILE   226     0.798   7.385  19.971  1.00 14.61
ATOM    524  CB  ILE   226     0.450   8.025  21.332  1.00 16.10
ATOM    525  CG2 ILE   226    -0.508   7.132  22.108  1.00 16.10
ATOM    526  CG1 ILE   226     1.729   8.293  22.132  1.00 16.10
ATOM    527  CD1 ILE   226     1.509   9.113  23.387  1.00 16.10
ATOM    528  C   ILE   226    -0.499   7.094  19.213  1.00 14.61
ATOM    529  O   ILE   226    -0.986   5.961  19.200  1.00 16.10
ATOM    530  N   THR   227    -1.042   8.123  18.569  1.00 15.93
ATOM    531  CA  THR   227    -2.278   7.997  17.800  1.00 15.93
ATOM    532  CB  THR   227    -2.706   9.360  17.207  1.00 22.37
ATOM    533  OG1 THR   227    -2.890  10.301  18.273  1.00 22.37
ATOM    534  CG2 THR   227    -4.014   9.232  16.434  1.00 22.37
ATOM    535  C   THR   227    -2.149   6.964  16.680  1.00 15.93
ATOM    536  O   THR   227    -3.091   6.217  16.402  1.00 22.37
ATOM    537  N   ARG   228    -0.982   6.916  16.045  1.00 14.49
ATOM    538  CA  ARG   228    -0.750   5.956  14.975  1.00 14.49
ATOM    539  CB  ARG   228     0.602   6.188  14.307  1.00 33.87
ATOM    540  CG  ARG   228     0.701   7.482  13.540  1.00 33.87
ATOM    541  CD  ARG   228     2.053   7.572  12.868  1.00 33.87
ATOM    542  NE  ARG   228     2.510   8.952  12.793  1.00 33.87
ATOM    543  CZ  ARG   228     3.551   9.431  13.469  1.00 33.87
ATOM    544  NH1 ARG   228     4.256   8.634  14.270  1.00 33.87
ATOM    545  NH2 ARG   228     3.864  10.716  13.374  1.00 33.87
ATOM    546  C   ARG   228    -0.813   4.531  15.516  1.00 14.49
ATOM    547  O   ARG   228    -1.309   3.632  14.839  1.00 33.87
ATOM    548  N   VAL   229    -0.313   4.327  16.735  1.00 14.80
ATOM    549  CA  VAL   229    -0.333   3.002  17.352  1.00 14.80
ATOM    550  CB  VAL   229     0.456   2.979  18.683  1.00 13.78
ATOM    551  CG1 VAL   229     0.339   1.612  19.350  1.00 13.78
ATOM    552  CG2 VAL   229     1.915   3.312  18.430  1.00 13.78
ATOM    553  C   VAL   229    -1.788   2.602  17.591  1.00 14.80
ATOM    554  O   VAL   229    -2.185   1.465  17.323  1.00 13.78
ATOM    555  N   VAL   230    -2.588   3.561  18.047  1.00  9.33
ATOM    556  CA  VAL   230    -4.005   3.327  18.292  1.00  9.33
ATOM    557  CB  VAL   230    -4.679   4.564  18.909  1.00 16.07
ATOM    558  CG1 VAL   230    -6.168   4.319  19.076  1.00 16.07
ATOM    559  CG2 VAL   230    -4.038   4.896  20.253  1.00 16.07
ATOM    560  C   VAL   230    -4.700   2.982  16.981  1.00  9.33
ATOM    561  O   VAL   230    -5.504   2.049  16.929  1.00 16.07
ATOM    562  N   ASP   231    -4.364   3.719  15.922  1.00 12.71
ATOM    563  CA  ASP   231    -4.951   3.496  14.603  1.00 12.71
ATOM    564  CB  ASP   231    -4.529   4.596  13.624  1.00 27.08
ATOM    565  CG  ASP   231    -5.053   5.967  14.020  1.00 27.08
ATOM    566  OD1 ASP   231    -6.144   6.047  14.624  1.00 27.08
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ATOM	567	OD2	ASP	231	-4.370	6.969	13.723	1.00	27.08
ATOM	568	C	ASP	231	-4.570	2.132	14.049	1.00	12.71
ATOM	569	O	ASP	231	-5.413	1.436	13.483	1.00	27.08
ATOM	570	N	PHE	232	-3.305	1.755	14.215	1.00	14.33
ATOM	571	CA	PHE	232	-2.823	0.461	13.748	1.00	14.33
ATOM	572	CB	PHE	232	-1.351	0.257	14.134	1.00	16.35
ATOM	573	CG	PHE	232	-0.911	-1.184	14.097	1.00	16.35
ATOM	574	CD1	PHE	232	-0.789	-1.862	12.887	1.00	16.35
ATOM	575	CD2	PHE	232	-0.661	-1.879	15.280	1.00	16.35
ATOM	576	CE1	PHE	232	-0.430	-3.208	12.851	1.00	16.35
ATOM	577	CE2	PHE	232	-0.302	-3.224	15.255	1.00	16.35
ATOM	578	CZ	PHE	232	-0.187	-3.890	14.038	1.00	16.35
ATOM	579	C	PHE	232	-3.670	-0.642	14.368	1.00	14.33
ATOM	580	O	PHE	232	-4.226	-1.482	13.661	1.00	16.35
ATOM	581	N	ALA	233	-3.769	-0.619	15.695	1.00	15.30
ATOM	582	CA	ALA	233	-4.537	-1.607	16.444	1.00	15.30
ATOM	583	CB	ALA	233	-4.413	-1.335	17.938	1.00	12.88
ATOM	584	C	ALA	233	-6.005	-1.609	16.030	1.00	15.30
ATOM	585	O	ALA	233	-6.627	-2.663	15.902	1.00	12.88
ATOM	586	N	LYS	234	-6.542	-0.419	15.795	1.00	25.69
ATOM	587	CA	LYS	234	-7.933	-0.256	15.401	1.00	25.69
ATOM	588	CB	LYS	234	-8.270	1.234	15.318	1.00	45.91
ATOM	589	CG	LYS	234	-9.574	1.595	15.979	1.00	45.91
ATOM	590	CD	LYS	234	-9.535	1.268	17.463	1.00	45.91
ATOM	591	CE	LYS	234	-10.938	1.047	18.006	1.00	45.91
ATOM	592	NZ	LYS	234	-11.605	-0.106	17.327	1.00	45.91
ATOM	593	C	LYS	234	-8.240	-0.931	14.067	1.00	25.69
ATOM	594	O	LYS	234	-9.368	-1.368	13.827	1.00	45.91
ATOM	595	N	LYS	235	-7.234	-1.019	13.204	1.00	17.44
ATOM	596	CA	LYS	235	-7.406	-1.627	11.892	1.00	17.44
ATOM	597	CB	LYS	235	-6.459	-0.975	10.884	1.00	26.26
ATOM	598	CG	LYS	235	-6.757	0.499	10.669	1.00	26.26
ATOM	599	CD	LYS	235	-5.785	1.141	9.706	1.00	26.26
ATOM	600	CE	LYS	235	-6.154	2.593	9.460	1.00	26.26
ATOM	601	NZ	LYS	235	-5.231	3.230	8.484	1.00	26.26
ATOM	602	C	LYS	235	-7.258	-3.146	11.875	1.00	17.44
ATOM	603	O	LYS	235	-7.365	-3.773	10.817	1.00	26.26
ATOM	604	N	LEU	236	-7.015	-3.738	13.040	1.00	21.99
ATOM	605	CA	LEU	236	-6.880	-5.187	13.144	1.00	21.99
ATOM	606	CB	LEU	236	-5.792	-5.564	14.154	1.00	25.38
ATOM	607	CG	LEU	236	-4.362	-5.127	13.818	1.00	25.38
ATOM	608	CD1	LEU	236	-3.415	-5.555	14.929	1.00	25.38
ATOM	609	CD2	LEU	236	-3.931	-5.725	12.491	1.00	25.38
ATOM	610	C	LEU	236	-8.219	-5.796	13.556	1.00	21.99
ATOM	611	O	LEU	236	-8.821	-5.386	14.553	1.00	25.38
ATOM	612	N	PRO	237	-8.682	-6.819	12.817	1.00	34.89
ATOM	613	CD	PRO	237	-7.936	-7.474	11.730	1.00	42.99

ATOM	614	CA	PRO	237	-9.953	-7.513	13.071	1.00	34.89
ATOM	615	CB	PRO	237	-9.911	-8.687	12.084	1.00	42.99
ATOM	616	CG	PRO	237	-8.433	-8.887	11.816	1.00	42.99
ATOM	617	C	PRO	237	-10.184	-7.986	14.513	1.00	34.89
ATOM	618	O	PRO	237	-11.142	-7.563	15.159	1.00	42.99
ATOM	619	N˙	MET	238	-9.301	-8.843	15.021	1.00	40.45
ATOM	620	CA	MET	238	-9.433	-9.364	16.382	1.00	40.45
ATOM	621	CB	MET	238	-8.360	-10.423	16.671	1.00	59.70
ATOM	622	CG	MET	238	-8.689	-11.839	16.195	1.00	59.70
ATOM	623	SD	MET	238	-8.013	-12.275	14.573	1.00	59.70
ATOM	624	CE	MET	238	-6.482	-13.074	15.032	1.00	59.70
ATOM	625	C	MET	238	-9.395	-8.305	17.486	1.00	40.45
ATOM	626	O	MET	238	-9.801	-8.574	18.617	1.00	59.70
ATOM	627	N	PHE	239	-8.928	-7.103	17.160	1.00	33.70
ATOM	628	CA	PHE	239	-8.829	-6.037	18.152	1.00	33.70
ATOM	629	CB	PHE	239	-7.651	-5.113	17.829	1.00	22.27
ATOM	630	CG	PHE	239	-7.386	-4.079	18.885	1.00	22.27
ATOM	631	CD1	PHE	239	-6.602	-4.385	19.990	1.00	22.27
ATOM	632	CD2	PHE	239	-7.926	-2.802	18.778	1.00	22.27
ATOM	633	CE1	PHE	239	-6.358	-3.436	20.974	1.00	22.27
ATOM	634	CE2	PHE	239	-7.688	-1.846	19.757	1.00	22.27
ATOM	635	CZ	PHE	239	-6.901	-2.163	20.857	1.00	22.27
ATOM	636	C	PHE	239	-10.103	-5.213	18.329	1.00	33.70
ATOM	637	O	PHE	239	-10.594	-5.059	19.446	1.00	22.27
ATOM	638	N	SER	240	-10.629	-4.679	17.232	1.00	23.42
ATOM	639	CA	SER	240	-11.837	-3.857	17.278	1.00	23.42
ATOM	640	CB	SER	240	-12.175	-3.352	15.884	1.00	26.21
ATOM	641	C	SER	240	-13.046	-4.562	17.899	1.00	23.42
ATOM	642	O	SER	240	-13.976	-3.909	18.369	1.00	26.21
ATOM	643	N	GLU	241	-13.028	-5.891	17.893	1.00	26.54
ATOM	644	CA	GLU	241	-14.116	-6.695	18.450	1.00	26.54
ATOM	645	CB	GLU	241	-14.007	-8.139	17.957	1.00	67.32
ATOM	646	CG	GLU	241	-14.241	-8.322	16.467	1.00	67.32
ATOM	647	CD	GLU	241	-13.979	-9.748	16.001	1.00	67.32
ATOM	648	OE1	GLU	241	-14.161	-10.691	16.803	1.00	67.32
ATOM	649	OE2	GLU	241	-13.584	-9.924	14.828	1.00	67.32
ATOM	650	C	GLU	241	-14.137	-6.706	19.975	1.00	26.54
ATOM	651	O	GLU	241	-15.182	-6.924	20.589	1.00	67.32
ATOM	652	N	LEU	242	-12.972	-6.506	20.579	1.00	26.16
ATOM	653	CA	LEU	242	-12.835	-6.514	22.030	1.00	26.16
ATOM	654	CB	LEU	242	-11.352	-6.473	22.412	1.00	19.79
ATOM	655	CG	LEU	242	-10.461	-7.627	21.956	1.00	19.79
ATOM	656	CD1	LEU	242	-9.014	-7.309	22.264	1.00	19.79
ATOM	657	CD2	LEU	242	-10.888	-8.912	22.640	1.00	19.79
ATOM	658	C	LEU	242	-13.547	-5.351	22.711	1.00	26.16
ATOM	659	O	LEU	242	-13.738	-4.290	22.115	1.00	19.79
ATOM	660	N	PRO	243	-13.980	-5.547	23.968	1.00	17.98

ATOM	661	CD	PRO	243	-13.996	-6.785	24.764	1.00	19.17
ATOM	662	CA	PRO	243	-14.657	-4.454	24.671	1.00	17.98
ATOM	663	CB	PRO	243	-15.095	-5.105	25.988	1.00	19.17
ATOM	664	CG	PRO	243	-14.155	-6.263	26.161	1.00	19.17
ATOM	665	C	PRO	243	-13.652	-3.323	24.898	1.00	17.98
ATOM	666	O˙	PRO	243	-12.458	-3.572	25.081	1.00	19.17
ATOM	667	N	CYS	244	-14.142	-2.088	24.880	1.00	20.08
ATOM	668	CA	CYS	244	-13.310	-0.900	25.059	1.00	20.08
ATOM	669	CB	CYS	244	-14.194	0.329	25.278	1.00	61.80
ATOM	670	SG	CYS	244	-13.674	1.784	24.340	1.00	61.80
ATOM	671	C	CYS	244	-12.286	-1.017	26.189	1.00	20.08
ATOM	672	O	CYS	244	-11.141	-0.590	26.040	1.00	61.80
ATOM	673	N	GLU	245	-12.691	-1.630	27.299	1.00	21.05
ATOM	674	CA	GLU	245	-11.814	-1.811	28.454	1.00	21.05
ATOM	675	CB	GLU	245	-12.541	-2.560	29.578	1.00	40.41
ATOM	676	CG	GLU	245	-13.510	-1.705	30.393	1.00	40.41
ATOM	677	CD	GLU	245	-14.953	-1.773	29.910	1.00	40.41
ATOM	678	OE1	GLU	245	-15.854	-1.761	30.775	1.00	40.41
ATOM	679	OE2	GLU	245	-15.197	-1.824	28.683	1.00	40.41
ATOM	680	C	GLU	245	-10.541	-2.558	28.084	1.00	21.05
ATOM	681	O	GLU	245	-9.439	-2.138	28.440	1.00	40.41
ATOM	682	N	ASP	246	-10.698	-3.654	27.351	1.00	17.22
ATOM	683	CA	ASP	246	-9.564	-4.463	26.924	1.00	17.22
ATOM	684	CB	ASP	246	-10.044	-5.774	26.303	1.00	30.41
ATOM	685	CG	ASP	246	-10.634	-6.727	27.327	1.00	30.41
ATOM	686	OD1	ASP	246	-10.755	-6.349	28.512	1.00	30.41
ATOM	687	OD2	ASP	246	-10.975	-7.864	26.946	1.00	30.41
ATOM	688	C	ASP	246	-8.693	-3.705	25.936	1.00	17.22
ATOM	689	O	ASP	246	-7.467	-3.713	26.050	1.00	30.41
ATOM	690	N	GLN	247	-9.332	-3.045	24.973	1.00	17.12
ATOM	691	CA	GLN	247	-8.615	-2.272	23.966	1.00	17.12
ATOM	692	CB	GLN	247	-9.594	-1.494	23.088	1.00	16.72
ATOM	693	CG	GLN	247	-10.504	-2.365	22.242	1.00	16.72
ATOM	694	CD	GLN	247	-11.352	-1.553	21.290	1.00	16.72
ATOM	695	OE1	GLN	247	-10.925	-0.515	20.790	1.00	16.72
ATOM	696	NE2	GLN	247	-12.560	-2.018	21.033	1.00	16.72
ATOM	697	C	GLN	247	-7.650	-1.303	24.637	1.00	17.12
ATOM	698	O	GLN	247	-6.476	-1.228	24.273	1.00	16.72
ATOM	699	N	ILE	248	-8.152	-0.591	25.640	1.00	19.19
ATOM	700	CA	ILE	248	-7.358	0.377	26.387	1.00	19.19
ATOM	701	CB	ILE	248	-8.238	1.137	27.410	1.00	24.32
ATOM	702	CG2	ILE	248	-7.385	2.055	28.282	1.00	24.32
ATOM	703	CG1	ILE	248	-9.312	1.942	26.668	1.00	24.32
ATOM	704	CD1	ILE	248	-10.327	2.618	27.573	1.00	24.32
ATOM	705	C	ILE	248	-6.180	-0.297	27.093	1.00	19.19
ATOM	706	O	ILE	248	-5.035	0.131	26.943	1.00	24.32
ATOM	707	N	ILE	249	-6.457	-1.367	27.830	1.00	12.09

ATOM	708	CA	ILE	249	-5.409	-2.090	28.547	1.00	12.09
ATOM	709	CB	ILE	249	-5.996	-3.295	29.322	1.00	30.01
ATOM	710	CG2	ILE	249	-4.884	-4.168	29.885	1.00	30.01
ATOM	711	CG1	ILE	249	-6.899	-2.794	30.451	1.00	30.01
ATOM	712	CD1	ILE	249	-7.598	-3.893	31.215	1.00	30.01
ATOM	713	C	ILE	249	-4.299	-2.561	27.602	1.00	12.09
ATOM	714	O	ILE	249	-3.115	-2.339	27.866	1.00	30.01
ATOM	715	N	LEU	250	-4.691	-3.168	26.486	1.00	20.87
ATOM	716	CA	LEU	250	-3.740	-3.669	25.498	1.00	20.87
ATOM	717	CB	LEU	250	-4.474	-4.410	24.376	1.00	15.15
ATOM	718	CG	LEU	250	-5.252	-5.669	24.761	1.00	15.15
ATOM	719	CD1	LEU	250	-5.907	-6.256	23.533	1.00	15.15
ATOM	720	CD2	LEU	250	-4.325	-6.686	25.400	1.00	15.15
ATOM	721	C	LEU	250	-2.900	-2.548	24.902	1.00	20.87
ATOM	722	O	LEU	250	-1.680	-2.667	24.792	1.00	15.15
ATOM	723	N	LEU	251	-3.559	-1.455	24.532	1.00	9.31
ATOM	724	CA	LEU	251	-2.887	-0.301	23.945	1.00	9.31
ATOM	725	CB	LEU	251	-3.920	0.760	23.553	1.00	19.90
ATOM	726	CG	LEU	251	-4.075	1.127	22.073	1.00	19.90
ATOM	727	CD1	LEU	251	-3.281	0.190	21.180	1.00	19.90
ATOM	728	CD2	LEU	251	-5.550	1.113	21.699	1.00	19.90
ATOM	729	C	LEU	251	-1.851	0.307	24.887	1.00	9.31
ATOM	730	O	LEU	251	-0.699	0.521	24.507	1.00	19.90
ATOM	731	N	LYS	252	-2.253	0.545	26.127	1.00	18.83
ATOM	732	CA	LYS	252	-1.362	1.132	27.114	1.00	18.83
ATOM	733	CB	LYS	252	-2.138	1.455	28.395	1.00	42.69
ATOM	734	CG	LYS	252	-3.395	2.274	28.130	1.00	42.69
ATOM	735	CD	LYS	252	-3.588	3.412	29.115	1.00	42.69
ATOM	736	CE	LYS	252	-3.998	2.934	30.493	1.00	42.69
ATOM	737	NZ	LYS	252	-4.300	4.109	31.361	1.00	42.69
ATOM	738	C	LYS	252	-0.171	0.222	27.408	1.00	18.83
ATOM	739	O	LYS	252	0.942	0.700	27.646	1.00	42.69
ATOM	740	N	GLY	253	-0.392	-1.086	27.328	1.00	16.16
ATOM	741	CA	GLY	253	0.676	-2.031	27.595	1.00	16.16
ATOM	742	C	GLY	253	1.688	-2.232	26.479	1.00	16.16
ATOM	743	O	GLY	253	2.836	-2.587	26.747	1.00	34.57
ATOM	744	N	CYS	254	1.286	-1.999	25.233	1.00	21.81
ATOM	745	CA	CYS	254	2.194	-2.203	24.108	1.00	21.81
ATOM	746	CB	CYS	254	1.563	-3.151	23.093	1.00	23.60
ATOM	747	SG	CYS	254	0.211	-2.387	22.179	1.00	23.60
ATOM	748	C	CYS	254	2.616	-0.935	23.380	1.00	21.81
ATOM	749	O	CYS	254	3.499	-0.983	22.521	1.00	23.60
ATOM	750	N	CYS	255	2.004	0.193	23.724	1.00	14.98
ATOM	751	CA	CYS	255	2.309	1.461	23.066	1.00	14.98
ATOM	752	CB	CYS	255	1.611	2.616	23.781	1.00	24.32
ATOM	753	SG	CYS	255	1.602	4.153	22.841	1.00	24.32
ATOM	754	C	CYS	255	3.804	1.750	22.922	1.00	14.98

ATOM	755	O	CYS	255	4.305	1.895	21.805	1.00	24.32
ATOM	756	N	MET	256	4.525	1.777	24.037	1.00	13.77
ATOM	757	CA	MET	256	5.959	2.056	24.003	1.00	13.77
ATOM	758	CB	MET	256	6.515	2.218	25.423	1.00	19.23
ATOM	759	CG	MET	256	7.988	2.607	25.477	1.00	19.23
ATOM	760	SD	MET	256	8.344	4.132	24.571	1.00	19.23
ATOM	761	CE	MET	256	10.127	4.254	24.782	1.00	19.23
ATOM	762	C	MET	256	6.734	0.978	23.246	1.00	13.77
ATOM	763	O	MET	256	7.672	1.284	22.516	1.00	19.23
ATOM	764	N	GLU	257	6.316	-0.275	23.400	1.00	12.57
ATOM	765	CA	GLU	257	6.971	-1.397	22.730	1.00	12.57
ATOM	766	CB	GLU	257	6.342	-2.716	23.182	1.00	31.54
ATOM	767	CG	GLU	257	6.497	-2.982	24.677	1.00	31.54
ATOM	768	CD	GLU	257	5.720	-4.196	25.167	1.00	31.54
ATOM	769	OE1	GLU	257	5.220	-4.983	24.334	1.00	31.54
ATOM	770	OE2	GLU	257	5.607	-4.361	26.400	1.00	31.54
ATOM	771	C	GLU	257	6.889	-1.254	21.211	1.00	12.57
ATOM	772	O	GLU	257	7.881	-1.452	20.505	1.00	31.54
ATOM	773	N	ILE	258	5.712	-0.881	20.717	1.00	17.89
ATOM	774	CA	ILE	258	5.508	-0.692	19.288	1.00	17.89
ATOM	775	CB	ILE	258	4.001	-0.555	18.946	1.00	15.57
ATOM	776	CG2	ILE	258	3.813	-0.129	17.493	1.00	15.57
ATOM	777	CG1	ILE	258	3.288	-1.886	19.211	1.00	15.57
ATOM	778	CD1	ILE	258	1.798	-1.872	18.922	1.00	15.57
ATOM	779	C	ILE	258	6.289	0.535	18.811	1.00	17.89
ATOM	780	O	ILE	258	7.000	0.468	17.805	1.00	15.57
ATOM	781	N	MET	259	6.196	1.636	19.556	1.00	11.23
ATOM	782	CA	MET	259	6.907	2.861	19.201	1.00	11.23
ATOM	783	CB	MET	259	6.568	3.995	20.175	1.00	22.19
ATOM	784	CG	MET	259	5.112	4.439	20.117	1.00	22.19
ATOM	785	SD	MET	259	4.828	6.033	20.915	1.00	22.19
ATOM	786	CE	MET	259	5.038	5.606	22.621	1.00	22.19
ATOM	787	C	MET	259	8.415	2.637	19.131	1.00	11.23
ATOM	788	O	MET	259	9.060	3.008	18.145	1.00	22.19
ATOM	789	N	SER	260	8.974	1.994	20.153	1.00	8.59
ATOM	790	CA	SER	260	10.408	1.706	20.195	1.00	8.59
ATOM	791	CB	SER	260	10.763	0.939	21.472	1.00	23.39
ATOM	792	OG	SER	260	10.430	1.685	22.623	1.00	23.39
ATOM	793	C	SER	260	10.793	0.864	18.977	1.00	8.59
ATOM	794	O	SER	260	11.824	1.100	18.350	1.00	23.39
ATOM	795	N	LEU	261	9.952	-0.111	18.644	1.00	13.26
ATOM	796	CA	LEU	261	10.194	-0.992	17.507	1.00	13.26
ATOM	797	CB	LEU	261	9.076	-2.035	17.401	1.00	14.32
ATOM	798	CG	LEU	261	9.019	-2.894	16.134	1.00	14.32
ATOM	799	CD1	LEU	261	10.278	-3.733	15.999	1.00	14.32
ATOM	800	CD2	LEU	261	7.785	-3.772	16.174	1.00	14.32
ATOM	801	C	LEU	261	10.276	-0.170	16.220	1.00	13.26

ATOM	802	O	LEU	261	11.213	-0.313	15.432	1.00	14.32
ATOM	803	N	ARG	262	9.330	0.744	16.043	1.00	10.57
ATOM	804	CA	ARG	262	9.278	1.598	14.861	1.00	10.57
ATOM	805	CB	ARG	262	8.018	2.454	14.917	1.00	16.08
ATOM	806	CG	ARG	262	6.755	1.647	14.728	1.00	16.08
ATOM	807	CD	ARG	262	5.540	2.525	14.614	1.00	16.08
ATOM	808	NE	ARG	262	4.418	1.765	14.076	1.00	16.08
ATOM	809	CZ	ARG	262	3.260	2.289	13.689	1.00	16.08
ATOM	810	NH1	ARG	262	3.050	3.596	13.780	1.00	16.08
ATOM	811	NH2	ARG	262	2.322	1.497	13.183	1.00	16.08
ATOM	812	C	ARG	262	10.530	2.471	14.704	1.00	10.57
ATOM	813	O	ARG	262	11.038	2.649	13.589	1.00	16.08
ATOM	814	N	ALA	263	11.016	3.014	15.820	1.00	13.37
ATOM	815	CA	ALA	263	12.221	3.842	15.831	1.00	13.37
ATOM	816	CB	ALA	263	12.363	4.516	17.172	1.00	17.12
ATOM	817	C	ALA	263	13.443	2.964	15.561	1.00	13.37
ATOM	818	O	ALA	263	14.313	3.316	14.762	1.00	17.12
ATOM	819	N	ALA	264	13.474	1.802	16.207	1.00	16.55
ATOM	820	CA	ALA	264	14.574	0.855	16.072	1.00	16.55
ATOM	821	CB	ALA	264	14.375	-0.327	17.019	1.00	24.62
ATOM	822	C	ALA	264	14.770	0.364	14.642	1.00	16.55
ATOM	823	O	ALA	264	15.904	0.244	14.169	1.00	24.62
ATOM	824	N	VAL	265	13.670	0.073	13.955	1.00	22.25
ATOM	825	CA	VAL	265	13.754	-0.401	12.583	1.00	22.25
ATOM	826	CB	VAL	265	12.428	-1.038	12.086	1.00	25.31
ATOM	827	CG1	VAL	265	12.079	-2.239	12.936	1.00	25.31
ATOM	828	CG2	VAL	265	11.302	-0.030	12.091	1.00	25.31
ATOM	829	C	VAL	265	14.208	0.707	11.639	1.00	22.25
ATOM	830	O	VAL	265	14.615	0.434	10.513	1.00	25.31
ATOM	831	N	ARG	266	14.124	1.955	12.092	1.00	26.45
ATOM	832	CA	ARG	266	14.567	3.086	11.283	1.00	26.45
ATOM	833	CB	ARG	266	13.596	4.261	11.399	1.00	38.04
ATOM	834	CG	ARG	266	12.232	4.019	10.807	1.00	38.04
ATOM	835	CD	ARG	266	11.503	5.339	10.651	1.00	38.04
ATOM	836	NE	ARG	266	10.074	5.216	10.925	1.00	38.04
ATOM	837	CZ	ARG	266	9.504	5.551	12.079	1.00	38.04
ATOM	838	NH1	ARG	266	10.237	6.038	13.075	1.00	38.04
ATOM	839	NH2	ARG	266	8.196	5.411	12.240	1.00	38.04
ATOM	840	C	ARG	266	15.957	3.531	11.729	1.00	26.45
ATOM	841	O	ARG	266	16.296	4.717	11.660	1.00	38.04
ATOM	842	N	TYR	267	16.733	2.590	12.251	1.00	24.87
ATOM	843	CA	TYR	267	18.083	2.888	12.700	1.00	24.87
ATOM	844	CB	TYR	267	18.592	1.788	13.639	1.00	25.84
ATOM	845	CG	TYR	267	20.073	1.865	13.931	1.00	25.84
ATOM	846	CD1	TYR	267	20.579	2.789	14.844	1.00	25.84
ATOM	847	CE1	TYR	267	21.940	2.865	15.103	1.00	25.84
ATOM	848	CD2	TYR	267	20.971	1.017	13.284	1.00	25.84

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ATOM   849  CE2 TYR   267     22.331   1.085  13.536  1.00 25.84
ATOM   850  CZ  TYR   267     22.810   2.011  14.444  1.00 25.84
ATOM   851  OH  TYR   267     24.162   2.078  14.683  1.00 25.84
ATOM   852  C   TYR   267     18.999   3.009  11.488  1.00 24.87
ATOM   853  O   TYR   267     19.019   2.130  10.625  1.00 25.84
ATOM   854  N˙  ASP   268     19.751   4.102  11.423  1.00 28.13
ATOM   855  CA  ASP   268     20.666   4.320  10.313  1.00 28.13
ATOM   856  CB  ASP   268     20.524   5.744   9.773  1.00 51.63
ATOM   857  CG  ASP   268     21.339   5.973   8.517  1.00 51.63
ATOM   858  OD1 ASP   268     21.060   5.305   7.498  1.00 51.63
ATOM   859  OD2 ASP   268     22.262   6.814   8.547  1.00 51.63
ATOM   860  C   ASP   268     22.105   4.068  10.749  1.00 28.13
ATOM   861  O   ASP   268     22.683   4.854  11.500  1.00 51.63
ATOM   862  N   PRO   269     22.707   2.964  10.276  1.00 37.07
ATOM   863  CD  PRO   269     22.103   1.938   9.410  1.00 39.18
ATOM   864  CA  PRO   269     24.086   2.612  10.623  1.00 37.07
ATOM   865  CB  PRO   269     24.319   1.324   9.832  1.00 39.18
ATOM   866  CG  PRO   269     22.950   0.735   9.706  1.00 39.18
ATOM   867  C   PRO   269     25.079   3.698  10.216  1.00 37.07
ATOM   868  O   PRO   269     26.003   4.006  10.964  1.00 39.18
ATOM   869  N   ALA   270     24.855   4.295   9.047  1.00 46.88
ATOM   870  CA  ALA   270     25.730   5.340   8.519  1.00 46.88
ATOM   871  CB  ALA   270     25.177   5.873   7.198  1.00 41.71
ATOM   872  C   ALA   270     25.974   6.493   9.492  1.00 46.88
ATOM   873  O   ALA   270     27.121   6.844   9.763  1.00 41.71
ATOM   874  N   SER   271     24.899   7.081  10.009  1.00 34.54
ATOM   875  CA  SER   271     25.013   8.198  10.941  1.00 34.54
ATOM   876  CB  SER   271     23.959   9.259  10.618  1.00 42.29
ATOM   877  OG  SER   271     22.686   8.668  10.422  1.00 42.29
ATOM   878  C   SER   271     24.910   7.793  12.408  1.00 34.54
ATOM   879  O   SER   271     25.169   8.607  13.297  1.00 42.29
ATOM   880  N   ASP   272     24.546   6.535  12.653  1.00 41.05
ATOM   881  CA  ASP   272     24.388   6.005  14.007  1.00 41.05
ATOM   882  CB  ASP   272     25.720   6.078  14.772  1.00 47.32
ATOM   883  CG  ASP   272     25.653   5.428  16.147  1.00 47.32
ATOM   884  OD1 ASP   272     24.981   4.384  16.299  1.00 47.32
ATOM   885  OD2 ASP   272     26.284   5.967  17.081  1.00 47.32
ATOM   886  C   ASP   272     23.279   6.777  14.730  1.00 41.05
ATOM   887  O   ASP   272     23.444   7.233  15.866  1.00 47.32
ATOM   888  N   THR   273     22.139   6.905  14.058  1.00 27.60
ATOM   889  CA  THR   273     20.996   7.618  14.608  1.00 27.60
ATOM   890  CB  THR   273     20.808   8.991  13.911  1.00 30.96
ATOM   891  OG1 THR   273     20.723   8.808  12.491  1.00 30.96
ATOM   892  CG2 THR   273     21.967   9.924  14.228  1.00 30.96
ATOM   893  C   THR   273     19.701   6.829  14.442  1.00 27.60
ATOM   894  O   THR   273     19.633   5.883  13.650  1.00 30.96
ATOM   895  N   LEU   274     18.696   7.192  15.232  1.00 20.89
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ATOM	896	CA	LEU	274	17.374	6.574	15.161	1.00	20.89
ATOM	897	CB	LEU	274	16.862	6.193	16.555	1.00	22.48
ATOM	898	CG	LEU	274	17.480	5.009	17.301	1.00	22.48
ATOM	899	CD1	LEU	274	16.798	4.866	18.650	1.00	22.48
ATOM	900	CD2	LEU	274	17.317	3.736	16.497	1.00	22.48
ATOM	901	C`	LEU	274	16.470	7.654	14.586	1.00	20.89
ATOM	902	O	LEU	274	16.753	8.842	14.744	1.00	22.48
ATOM	903	N	THR	275	15.393	7.258	13.922	1.00	27.89
ATOM	904	CA	THR	275	14.478	8.235	13.354	1.00	27.89
ATOM	905	CB	THR	275	14.325	8.045	11.832	1.00	37.64
ATOM	906	OG1	THR	275	15.622	7.983	11.228	1.00	37.64
ATOM	907	CG2	THR	275	13.570	9.215	11.222	1.00	37.64
ATOM	908	C	THR	275	13.120	8.135	14.032	1.00	27.89
ATOM	909	O	THR	275	12.493	7.081	14.019	1.00	37.64
ATOM	910	N	LEU	276	12.700	9.226	14.667	1.00	28.07
ATOM	911	CA	LEU	276	11.418	9.275	15.358	1.00	28.07
ATOM	912	CB	LEU	276	11.497	10.214	16.572	1.00	24.81
ATOM	913	CG	LEU	276	12.639	10.005	17.577	1.00	24.81
ATOM	914	CD1	LEU	276	12.450	10.929	18.769	1.00	24.81
ATOM	915	CD2	LEU	276	12.692	8.558	18.038	1.00	24.81
ATOM	916	C	LEU	276	10.339	9.761	14.395	1.00	28.07
ATOM	917	O	LEU	276	10.533	10.760	13.691	1.00	24.81
ATOM	918	N	SER	277	9.232	9.027	14.331	1.00	29.24
ATOM	919	CA	SER	277	8.106	9.357	13.458	1.00	29.24
ATOM	920	CB	SER	277	7.369	10.594	13.985	1.00	30.56
ATOM	921	OG	SER	277	6.845	10.358	15.283	1.00	30.56
ATOM	922	C	SER	277	8.533	9.569	12.005	1.00	29.24
ATOM	923	O	SER	277	7.902	10.326	11.263	1.00	30.56
ATOM	924	N	GLY	278	9.619	8.908	11.618	1.00	34.41
ATOM	925	CA	GLY	278	10.135	9.024	10.263	1.00	34.41
ATOM	926	C	GLY	278	10.472	10.442	9.830	1.00	34.41
ATOM	927	O	GLY	278	10.516	10.725	8.631	1.00	44.04
ATOM	928	N	GLU	279	10.733	11.326	10.791	1.00	37.82
ATOM	929	CA	GLU	279	11.056	12.717	10.479	1.00	37.82
ATOM	930	CB	GLU	279	9.808	13.600	10.612	1.00	70.24
ATOM	931	CG	GLU	279	9.202	13.631	12.014	1.00	70.24
ATOM	932	CD	GLU	279	8.028	14.593	12.141	1.00	70.24
ATOM	933	OE1	GLU	279	8.028	15.406	13.093	1.00	70.24
ATOM	934	OE2	GLU	279	7.103	14.535	11.301	1.00	70.24
ATOM	935	C	GLU	279	12.192	13.321	11.300	1.00	37.82
ATOM	936	O	GLU	279	12.857	14.248	10.841	1.00	70.24
ATOM	937	N	MET	280	12.424	12.811	12.505	1.00	33.77
ATOM	938	CA	MET	280	13.482	13.360	13.344	1.00	33.77
ATOM	939	CB	MET	280	12.903	13.848	14.674	1.00	33.89
ATOM	940	CG	MET	280	13.898	14.595	15.545	1.00	33.89
ATOM	941	SD	MET	280	13.350	14.740	17.256	1.00	33.89
ATOM	942	CE	MET	280	12.100	16.017	17.121	1.00	33.89

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ATOM   943  C   MET   280     14.620  12.383  13.613  1.00 33.77
ATOM   944  O   MET   280     14.432  11.366  14.282  1.00 33.89
ATOM   945  N   ALA   281     15.797  12.690  13.080  1.00 30.24
ATOM   946  CA  ALA   281     16.972  11.852  13.287  1.00 30.24
ATOM   947  CB  ALA   281     17.937  11.998  12.120  1.00 25.10
ATOM   948  C`  ALA   281     17.631  12.309  14.587  1.00 30.24
ATOM   949  O   ALA   281     18.008  13.477  14.718  1.00 25.10
ATOM   950  N   VAL   282     17.743  11.401  15.551  1.00 32.12
ATOM   951  CA  VAL   282     18.339  11.726  16.844  1.00 32.12
ATOM   952  CB  VAL   282     17.303  11.606  17.991  1.00 37.75
ATOM   953  CG1 VAL   282     16.184  12.615  17.799  1.00 37.75
ATOM   954  CG2 VAL   282     16.739  10.193  18.055  1.00 37.75
ATOM   955  C   VAL   282     19.543  10.852  17.181  1.00 32.12
ATOM   956  O   VAL   282     19.614   9.690  16.778  1.00 37.75
ATOM   957  N   LYS   283     20.491  11.428  17.913  1.00 26.82
ATOM   958  CA  LYS   283     21.700  10.722  18.328  1.00 26.82
ATOM   959  CB  LYS   283     22.894  11.679  18.342  1.00 57.25
ATOM   960  CG  LYS   283     23.258  12.245  16.979  1.00 57.25
ATOM   961  CD  LYS   283     24.282  13.361  17.105  1.00 57.25
ATOM   962  CE  LYS   283     24.752  13.836  15.741  1.00 57.25
ATOM   963  NZ  LYS   283     25.518  12.772  15.033  1.00 57.25
ATOM   964  C   LYS   283     21.509  10.120  19.717  1.00 26.82
ATOM   965  O   LYS   283     20.648  10.566  20.477  1.00 57.25
ATOM   966  N   ARG   284     22.351   9.146  20.058  1.00 26.41
ATOM   967  CA  ARG   284     22.297   8.457  21.351  1.00 26.41
ATOM   968  CB  ARG   284     23.527   7.566  21.528  1.00 41.02
ATOM   969  CG  ARG   284     23.715   6.539  20.440  1.00 41.02
ATOM   970  CD  ARG   284     25.016   5.794  20.616  1.00 41.02
ATOM   971  NE  ARG   284     25.145   4.730  19.630  1.00 41.02
ATOM   972  CZ  ARG   284     24.759   3.475  19.831  1.00 41.02
ATOM   973  NH1 ARG   284     24.221   3.117  20.990  1.00 41.02
ATOM   974  NH2 ARG   284     24.886   2.584  18.859  1.00 41.02
ATOM   975  C   ARG   284     22.200   9.399  22.543  1.00 26.41
ATOM   976  O   ARG   284     21.296   9.278  23.370  1.00 41.02
ATOM   977  N   GLU   285     23.152  10.321  22.634  1.00 33.23
ATOM   978  CA  GLU   285     23.201  11.292  23.721  1.00 33.23
ATOM   979  CB  GLU   285     24.366  12.258  23.492  1.00 69.82
ATOM   980  CG  GLU   285     24.485  13.359  24.533  1.00 69.82
ATOM   981  CD  GLU   285     25.079  14.636  23.964  1.00 69.82
ATOM   982  OE1 GLU   285     26.309  14.826  24.070  1.00 69.82
ATOM   983  OE2 GLU   285     24.309  15.453  23.409  1.00 69.82
ATOM   984  C   GLU   285     21.898  12.082  23.823  1.00 33.23
ATOM   985  O   GLU   285     21.336  12.239  24.907  1.00 69.82
ATOM   986  N   GLN   286     21.414  12.551  22.677  1.00 28.07
ATOM   987  CA  GLN   286     20.194  13.346  22.614  1.00 28.07
ATOM   988  CB  GLN   286     19.948  13.824  21.181  1.00 41.05
ATOM   989  CG  GLN   286     21.051  14.726  20.639  1.00 41.05
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ATOM	990	CD	GLN	286	20.808	15.154	19.202	1.00	41.05
ATOM	991	OE1	GLN	286	20.783	14.322	18.293	1.00	41.05
ATOM	992	NE2	GLN	286	20.635	16.452	18.990	1.00	41.05
ATOM	993	C	GLN	286	18.955	12.642	23.162	1.00	28.07
ATOM	994	O	GLN	286	18.281	13.174	24.048	1.00	41.05
ATOM	995	N⁻	LEU	287	18.663	11.447	22.658	1.00	30.11
ATOM	996	CA	LEU	287	17.492	10.705	23.116	1.00	30.11
ATOM	997	CB	LEU	287	17.232	9.489	22.219	1.00	21.70
ATOM	998	CG	LEU	287	15.859	8.821	22.357	1.00	21.70
ATOM	999	CD1	LEU	287	14.748	9.818	22.061	1.00	21.70
ATOM	1000	CD2	LEU	287	15.763	7.628	21.421	1.00	21.70
ATOM	1001	C	LEU	287	17.641	10.277	24.577	1.00	30.11
ATOM	1002	O	LEU	287	16.655	10.212	25.320	1.00	21.70
ATOM	1003	N	LYS	288	18.878	10.015	24.992	1.00	20.72
ATOM	1004	CA	LYS	288	19.156	9.611	26.365	1.00	20.72
ATOM	1005	CB	LYS	288	20.626	9.213	26.514	1.00	43.14
ATOM	1006	CG	LYS	288	20.991	8.721	27.903	1.00	43.14
ATOM	1007	CD	LYS	288	22.374	8.102	27.931	1.00	43.14
ATOM	1008	CE	LYS	288	22.615	7.379	29.250	1.00	43.14
ATOM	1009	NZ	LYS	288	23.866	6.568	29.224	1.00	43.14
ATOM	1010	C	LYS	288	18.819	10.742	27.331	1.00	20.72
ATOM	1011	O	LYS	288	18.027	10.566	28.261	1.00	43.14
ATOM	1012	N	ASN	289	19.380	11.917	27.067	1.00	33.64
ATOM	1013	CA	ASN	289	19.156	13.090	27.906	1.00	33.64
ATOM	1014	CB	ASN	289	20.190	14.173	27.590	1.00	35.61
ATOM	1015	CG	ASN	289	21.607	13.730	27.898	1.00	35.61
ATOM	1016	OD1	ASN	289	21.835	12.920	28.797	1.00	35.61
ATOM	1017	ND2	ASN	289	22.566	14.253	27.149	1.00	35.61
ATOM	1018	C	ASN	289	17.747	13.654	27.757	1.00	33.64
ATOM	1019	O	ASN	289	17.276	14.399	28.616	1.00	35.61
ATOM	1020	N	GLY	290	17.072	13.287	26.672	1.00	22.05
ATOM	1021	CA	GLY	290	15.722	13.767	26.435	1.00	22.05
ATOM	1022	C	GLY	290	14.688	13.247	27.416	1.00	22.05
ATOM	1023	O	GLY	290	13.550	13.710	27.420	1.00	29.95
ATOM	1024	N	GLY	291	15.072	12.276	28.239	1.00	24.91
ATOM	1025	CA	GLY	291	14.142	11.732	29.211	1.00	24.91
ATOM	1026	C	GLY	291	14.093	10.217	29.248	1.00	24.91
ATOM	1027	O	GLY	291	13.536	9.640	30.179	1.00	29.39
ATOM	1028	N	LEU	292	14.676	9.567	28.246	1.00	30.21
ATOM	1029	CA	LEU	292	14.675	8.110	28.189	1.00	30.21
ATOM	1030	CB	LEU	292	14.732	7.626	26.734	1.00	21.45
ATOM	1031	CG	LEU	292	13.439	7.795	25.928	1.00	21.45
ATOM	1032	CD1	LEU	292	13.612	7.225	24.542	1.00	21.45
ATOM	1033	CD2	LEU	292	12.296	7.087	26.630	1.00	21.45
ATOM	1034	C	LEU	292	15.785	7.461	29.013	1.00	30.21
ATOM	1035	O	LEU	292	15.645	6.324	29.473	1.00	21.45
ATOM	1036	N	GLY	293	16.885	8.180	29.205	1.00	16.29

ATOM	1037	CA	GLY	293	17.992	7.638	29.970	1.00	16.29
ATOM	1038	C	GLY	293	18.534	6.374	29.332	1.00	16.29
ATOM	1039	O	GLY	293	18.763	6.334	28.122	1.00	25.88
ATOM	1040	N	VAL	294	18.689	5.322	30.130	1.00	33.05
ATOM	1041	CA	VAL	294	19.211	4.050	29.635	1.00	33.05
ATOM	1042	CB	VAL	294	19.530	3.069	30.788	1.00	30.11
ATOM	1043	CG1	VAL	294	20.718	3.577	31.582	1.00	30.11
ATOM	1044	CG2	VAL	294	18.315	2.887	31.697	1.00	30.11
ATOM	1045	C	VAL	294	18.302	3.361	28.617	1.00	33.05
ATOM	1046	O	VAL	294	18.768	2.545	27.817	1.00	30.11
ATOM	1047	N	VAL	295	17.014	3.699	28.635	1.00	18.14
ATOM	1048	CA	VAL	295	16.056	3.118	27.698	1.00	18.14
ATOM	1049	CB	VAL	295	14.638	3.698	27.902	1.00	28.34
ATOM	1050	CG1	VAL	295	13.668	3.099	26.893	1.00	28.34
ATOM	1051	CG2	VAL	295	14.159	3.431	29.317	1.00	28.34
ATOM	1052	C	VAL	295	16.521	3.415	26.275	1.00	18.14
ATOM	1053	O	VAL	295	16.395	2.577	25.383	1.00	28.34
ATOM	1054	N	SER	296	17.091	4.601	26.085	1.00	20.84
ATOM	1055	CA	SER	296	17.596	5.028	24.785	1.00	20.84
ATOM	1056	CB	SER	296	18.160	6.446	24.884	1.00	25.61
ATOM	1057	OG	SER	296	18.615	6.911	23.627	1.00	25.61
ATOM	1058	C	SER	296	18.687	4.074	24.307	1.00	20.84
ATOM	1059	O	SER	296	18.723	3.691	23.133	1.00	25.61
ATOM	1060	N	ASP	297	19.571	3.691	25.224	1.00	28.08
ATOM	1061	CA	ASP	297	20.660	2.777	24.904	1.00	28.08
ATOM	1062	CB	ASP	297	21.555	2.552	26.129	1.00	51.15
ATOM	1063	CG	ASP	297	22.207	3.835	26.629	1.00	51.15
ATOM	1064	OD1	ASP	297	22.508	4.725	25.804	1.00	51.15
ATOM	1065	OD2	ASP	297	22.425	3.948	27.855	1.00	51.15
ATOM	1066	C	ASP	297	20.079	1.450	24.434	1.00	28.08
ATOM	1067	O	ASP	297	20.549	0.869	23.456	1.00	51.15
ATOM	1068	N	ALA	298	19.024	1.006	25.111	1.00	26.12
ATOM	1069	CA	ALA	298	18.357	-0.245	24.778	1.00	26.12
ATOM	1070	CB	ALA	298	17.253	-0.530	25.787	1.00	18.80
ATOM	1071	C	ALA	298	17.790	-0.223	23.356	1.00	26.12
ATOM	1072	O	ALA	298	18.014	-1.154	22.575	1.00	18.80
ATOM	1073	N	ILE	299	17.078	0.848	23.013	1.00	17.42
ATOM	1074	CA	ILE	299	16.483	0.979	21.686	1.00	17.42
ATOM	1075	CB	ILE	299	15.559	2.211	21.597	1.00	16.69
ATOM	1076	CG2	ILE	299	14.845	2.238	20.253	1.00	16.69
ATOM	1077	CG1	ILE	299	14.515	2.149	22.712	1.00	16.69
ATOM	1078	CD1	ILE	299	13.713	3.406	22.872	1.00	16.69
ATOM	1079	C	ILE	299	17.563	1.042	20.609	1.00	17.42
ATOM	1080	O	ILE	299	17.416	0.443	19.542	1.00	16.69
ATOM	1081	N	PHE	300	18.652	1.752	20.889	1.00	14.46
ATOM	1082	CA	PHE	300	19.751	1.851	19.935	1.00	14.46
ATOM	1083	CB	PHE	300	20.804	2.854	20.409	1.00	24.01

ATOM	1084	CG	PHE	300	20.656	4.221	19.801	1.00	24.01
ATOM	1085	CD1	PHE	300	19.904	5.204	20.435	1.00	24.01
ATOM	1086	CD2	PHE	300	21.271	4.526	18.591	1.00	24.01
ATOM	1087	CE1	PHE	300	19.766	6.472	19.873	1.00	24.01
ATOM	1088	CE2	PHE	300	21.140	5.791	18.020	1.00	24.01
ATOM	1089	CZ	PHE	300	20.385	6.765	18.663	1.00	24.01
ATOM	1090	C	PHE	300	20.383	0.480	19.726	1.00	14.46
ATOM	1091	O	PHE	300	20.696	0.102	18.596	1.00	24.01
ATOM	1092	N	GLU	301	20.547	-0.270	20.813	1.00	21.61
ATOM	1093	CA	GLU	301	21.123	-1.609	20.744	1.00	21.61
ATOM	1094	CB	GLU	301	21.289	-2.192	22.143	1.00	23.89
ATOM	1095	C	GLU	301	20.211	-2.498	19.904	1.00	21.61
ATOM	1096	O	GLU	301	20.681	-3.251	19.043	1.00	23.89
ATOM	1097	N	LEU	302	18.906	-2.390	20.140	1.00	14.43
ATOM	1098	CA	LEU	302	17.922	-3.168	19.399	1.00	14.43
ATOM	1099	CB	LEU	302	16.512	-2.872	19.912	1.00	23.43
ATOM	1100	CG	LEU	302	15.350	-3.669	19.312	1.00	23.43
ATOM	1101	CD1	LEU	302	15.459	-5.140	19.688	1.00	23.43
ATOM	1102	CD2	LEU	302	14.035	-3.094	19.804	1.00	23.43
ATOM	1103	C	LEU	302	18.027	-2.812	17.917	1.00	14.43
ATOM	1104	O	LEU	302	18.089	-3.697	17.066	1.00	23.43
ATOM	1105	N	GLY	303	18.098	-1.515	17.625	1.00	15.17
ATOM	1106	CA	GLY	303	18.208	-1.056	16.251	1.00	15.17
ATOM	1107	C	GLY	303	19.411	-1.640	15.530	1.00	15.17
ATOM	1108	O	GLY	303	19.290	-2.137	14.406	1.00	27.67
ATOM	1109	N	LYS	304	20.570	-1.594	16.182	1.00	19.04
ATOM	1110	CA	LYS	304	21.802	-2.127	15.605	1.00	19.04
ATOM	1111	CB	LYS	304	22.979	-1.975	16.577	1.00	56.94
ATOM	1112	CG	LYS	304	23.496	-0.556	16.741	1.00	56.94
ATOM	1113	CD	LYS	304	24.811	-0.524	17.516	1.00	56.94
ATOM	1114	CE	LYS	304	24.634	-0.965	18.968	1.00	56.94
ATOM	1115	NZ	LYS	304	23.838	0.008	19.778	1.00	56.94
ATOM	1116	C	LYS	304	21.653	-3.596	15.229	1.00	19.04
ATOM	1117	O	LYS	304	21.974	-3.993	14.107	1.00	56.94
ATOM	1118	N	SER	305	21.146	-4.394	16.164	1.00	24.46
ATOM	1119	CA	SER	305	20.965	-5.822	15.932	1.00	24.46
ATOM	1120	CB	SER	305	20.610	-6.533	17.240	1.00	37.46
ATOM	1121	OG	SER	305	19.444	-5.984	17.827	1.00	37.46
ATOM	1122	C	SER	305	19.926	-6.128	14.853	1.00	24.46
ATOM	1123	O	SER	305	20.146	-6.996	14.006	1.00	37.46
ATOM	1124	N	LEU	306	18.819	-5.390	14.858	1.00	25.47
ATOM	1125	CA	LEU	306	17.753	-5.592	13.881	1.00	25.47
ATOM	1126	CB	LEU	306	16.525	-4.746	14.224	1.00	15.99
ATOM	1127	CG	LEU	306	15.700	-5.190	15.432	1.00	15.99
ATOM	1128	CD1	LEU	306	14.504	-4.271	15.600	1.00	15.99
ATOM	1129	CD2	LEU	306	15.244	-6.624	15.247	1.00	15.99
ATOM	1130	C	LEU	306	18.174	-5.330	12.439	1.00	25.47

ATOM	1131	O	LEU	306	17.596	-5.902	11.513	1.00	15.99
ATOM	1132	N	SER	307	19.182	-4.482	12.247	1.00	24.28
ATOM	1133	CA	SER	307	19.670	-4.160	10.907	1.00	24.28
ATOM	1134	CB	SER	307	20.910	-3.263	10.989	1.00	40.92
ATOM	1135	OG	SER	307	20.617	-2.028	11.622	1.00	40.92
ATOM	1136	C	SER	307	19.995	-5.422	10.107	1.00	24.28
ATOM	1137	O	SER	307	19.625	-5.535	8.936	1.00	40.92
ATOM	1138	N	ALA	308	20.644	-6.383	10.761	1.00	30.97
ATOM	1139	CA	ALA	308	21.027	-7.640	10.124	1.00	30.97
ATOM	1140	CB	ALA	308	22.004	-8.399	11.013	1.00	37.84
ATOM	1141	C	ALA	308	19.830	-8.528	9.779	1.00	30.97
ATOM	1142	O	ALA	308	19.897	-9.336	8.853	1.00	37.84
ATOM	1143	N	PHE	309	18.737	-8.372	10.520	1.00	22.78
ATOM	1144	CA	PHE	309	17.533	-9.166	10.292	1.00	22.78
ATOM	1145	CB	PHE	309	16.571	-9.037	11.477	1.00	30.14
ATOM	1146	CG	PHE	309	17.032	-9.751	12.716	1.00	30.14
ATOM	1147	CD1	PHE	309	16.299	-10.809	13.236	1.00	30.14
ATOM	1148	CD2	PHE	309	18.204	-9.372	13.359	1.00	30.14
ATOM	1149	CE1	PHE	309	16.725	-11.481	14.378	1.00	30.14
ATOM	1150	CE2	PHE	309	18.640	-10.038	14.503	1.00	30.14
ATOM	1151	CZ	PHE	309	17.896	-11.094	15.013	1.00	30.14
ATOM	1152	C	PHE	309	16.818	-8.813	8.990	1.00	22.78
ATOM	1153	O	PHE	309	16.068	-9.631	8.451	1.00	30.14
ATOM	1154	N	ASN	310	17.051	-7.598	8.496	1.00	35.30
ATOM	1155	CA	ASN	310	16.441	-7.109	7.255	1.00	35.30
ATOM	1156	CB	ASN	310	17.109	-7.760	6.037	1.00	28.28
ATOM	1157	C	ASN	310	14.929	-7.339	7.229	1.00	35.30
ATOM	1158	O	ASN	310	14.395	-7.970	6.312	1.00	28.28
ATOM	1159	N	LEU	311	14.249	-6.831	8.251	1.00	27.52
ATOM	1160	CA	LEU	311	12.803	-6.979	8.369	1.00	27.52
ATOM	1161	CB	LEU	311	12.351	-6.630	9.788	1.00	22.62
ATOM	1162	CG	LEU	311	12.950	-7.396	10.968	1.00	22.62
ATOM	1163	CD1	LEU	311	12.360	-6.864	12.268	1.00	22.62
ATOM	1164	CD2	LEU	311	12.672	-8.881	10.821	1.00	22.62
ATOM	1165	C	LEU	311	12.060	-6.085	7.382	1.00	27.52
ATOM	1166	O	LEU	311	12.519	-4.986	7.067	1.00	22.62
ATOM	1167	N	ASP	312	10.918	-6.563	6.892	1.00	16.74
ATOM	1168	CA	ASP	312	10.095	-5.789	5.968	1.00	16.74
ATOM	1169	CB	ASP	312	9.803	-6.578	4.673	1.00	16.35
ATOM	1170	CG	ASP	312	8.924	-7.814	4.888	1.00	16.35
ATOM	1171	OD1	ASP	312	8.591	-8.168	6.037	1.00	16.35
ATOM	1172	OD2	ASP	312	8.559	-8.446	3.876	1.00	16.35
ATOM	1173	C	ASP	312	8.808	-5.354	6.678	1.00	16.74
ATOM	1174	O	ASP	312	8.535	-5.798	7.797	1.00	16.35
ATOM	1175	N	ASP	313	8.007	-4.520	6.019	1.00	5.43
ATOM	1176	CA	ASP	313	6.758	-4.016	6.592	1.00	5.43
ATOM	1177	CB	ASP	313	5.974	-3.201	5.559	1.00	31.80

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ATOM   1178 CG  ASP  313    6.670  -1.906   5.183  1.00 31.80
ATOM   1179 OD1 ASP  313    7.392  -1.340   6.033  1.00 31.80
ATOM   1180 OD2 ASP  313    6.493  -1.452   4.032  1.00 31.80
ATOM   1181 C   ASP  313    5.849  -5.081   7.189  1.00  5.43
ATOM   1182 O   ASP  313    5.216  -4.849   8.221  1.00 31.80
ATOM   1183 N   THR  314    5.777  -6.238   6.543  1.00 12.98
ATOM   1184 CA  THR  314    4.934  -7.327   7.022  1.00 12.98
ATOM   1185 CB  THR  314    4.825  -8.441   5.968  1.00 18.90
ATOM   1186 OG1 THR  314    4.249  -7.904   4.769  1.00 18.90
ATOM   1187 CG2 THR  314    3.960  -9.578   6.477  1.00 18.90
ATOM   1188 C   THR  314    5.426  -7.910   8.349  1.00 12.98
ATOM   1189 O   THR  314    4.636  -8.124   9.268  1.00 18.90
ATOM   1190 N   GLU  315    6.731  -8.135   8.457  1.00  9.13
ATOM   1191 CA  GLU  315    7.316  -8.685   9.675  1.00  9.13
ATOM   1192 CB  GLU  315    8.771  -9.078   9.427  1.00 11.49
ATOM   1193 CG  GLU  315    8.870 -10.323   8.562  1.00 11.49
ATOM   1194 CD  GLU  315   10.233 -10.544   7.945  1.00 11.49
ATOM   1195 OE1 GLU  315   10.964  -9.561   7.705  1.00 11.49
ATOM   1196 OE2 GLU  315   10.558 -11.715   7.669  1.00 11.49
ATOM   1197 C   GLU  315    7.180  -7.720  10.847  1.00  9.13
ATOM   1198 O   GLU  315    6.863  -8.131  11.967  1.00 11.49
ATOM   1199 N   VAL  316    7.376  -6.433  10.575  1.00  9.46
ATOM   1200 CA  VAL  316    7.240  -5.406  11.602  1.00  9.46
ATOM   1201 CB  VAL  316    7.655  -4.015  11.063  1.00  7.95
ATOM   1202 CG1 VAL  316    7.434  -2.941  12.124  1.00  7.95
ATOM   1203 CG2 VAL  316    9.112  -4.037  10.625  1.00  7.95
ATOM   1204 C   VAL  316    5.777  -5.365  12.051  1.00  9.46
ATOM   1205 O   VAL  316    5.484  -5.300  13.247  1.00  7.95
ATOM   1206 N   ALA  317    4.866  -5.438  11.083  1.00  5.52
ATOM   1207 CA  ALA  317    3.434  -5.417  11.355  1.00  5.52
ATOM   1208 CB  ALA  317    2.656  -5.415  10.054  1.00 10.98
ATOM   1209 C   ALA  317    3.002  -6.595  12.225  1.00  5.52
ATOM   1210 O   ALA  317    2.317  -6.412  13.230  1.00 10.98
ATOM   1211 N   LEU  318    3.411  -7.799  11.838  1.00  8.62
ATOM   1212 CA  LEU  318    3.067  -9.003  12.584  1.00  8.62
ATOM   1213 CB  LEU  318    3.523 -10.249  11.825  1.00 10.49
ATOM   1214 CG  LEU  318    2.770 -10.494  10.514  1.00 10.49
ATOM   1215 CD1 LEU  318    3.376 -11.664   9.769  1.00 10.49
ATOM   1216 CD2 LEU  318    1.297 -10.741  10.799  1.00 10.49
ATOM   1217 C   LEU  318    3.674  -8.971  13.978  1.00  8.62
ATOM   1218 O   LEU  318    3.047  -9.407  14.945  1.00 10.49
ATOM   1219 N   LEU  319    4.885  -8.435  14.082  1.00  9.43
ATOM   1220 CA  LEU  319    5.560  -8.325  15.366  1.00  9.43
ATOM   1221 CB  LEU  319    6.975  -7.773  15.173  1.00 24.05
ATOM   1222 CG  LEU  319    7.901  -7.680  16.389  1.00 24.05
ATOM   1223 CD1 LEU  319    7.889  -8.977  17.182  1.00 24.05
ATOM   1224 CD2 LEU  319    9.310  -7.356  15.922  1.00 24.05
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ATOM	1225	C	LEU	319	4.731	-7.404	16.259	1.00	9.43
ATOM	1226	O	LEU	319	4.456	-7.731	17.416	1.00	24.05
ATOM	1227	N	GLN	320	4.287	-6.282	15.699	1.00	8.67
ATOM	1228	CA	GLN	320	3.467	-5.325	16.437	1.00	8.67
ATOM	1229	CB	GLN	320	3.151	-4.102	15.573	1.00	10.94
ATOM	1230	CG	GLN	320	4.361	-3.256	15.218	1.00	10.94
ATOM	1231	CD	GLN	320	4.025	-2.045	14.359	1.00	10.94
ATOM	1232	OE1	GLN	320	4.889	-1.217	14.082	1.00	10.94
ATOM	1233	NE2	GLN	320	2.773	-1.940	13.924	1.00	10.94
ATOM	1234	C	GLN	320	2.169	-5.984	16.895	1.00	8.67
ATOM	1235	O	GLN	320	1.708	-5.751	18.013	1.00	10.94
ATOM	1236	N	ALA	321	1.586	-6.806	16.028	1.00	9.21
ATOM	1237	CA	ALA	321	0.349	-7.513	16.342	1.00	9.21
ATOM	1238	CB	ALA	321	-0.136	-8.283	15.129	1.00	12.83
ATOM	1239	C	ALA	321	0.558	-8.460	17.523	1.00	9.21
ATOM	1240	O	ALA	321	-0.315	-8.591	18.382	1.00	12.83
ATOM	1241	N	VAL	322	1.718	-9.111	17.566	1.00	9.10
ATOM	1242	CA	VAL	322	2.043	-10.030	18.651	1.00	9.10
ATOM	1243	CB	VAL	322	3.340	-10.827	18.352	1.00	15.92
ATOM	1244	CG1	VAL	322	3.783	-11.614	19.575	1.00	15.92
ATOM	1245	CG2	VAL	322	3.106	-11.780	17.194	1.00	15.92
ATOM	1246	C	VAL	322	2.192	-9.256	19.960	1.00	9.10
ATOM	1247	O	VAL	322	1.707	-9.691	21.003	1.00	15.92
ATOM	1248	N	LEU	323	2.856	-8.106	19.893	1.00	11.07
ATOM	1249	CA	LEU	323	3.062	-7.257	21.064	1.00	11.07
ATOM	1250	CB	LEU	323	3.959	-6.070	20.705	1.00	16.31
ATOM	1251	CG	LEU	323	5.377	-6.393	20.229	1.00	16.31
ATOM	1252	CD1	LEU	323	6.039	-5.149	19.669	1.00	16.31
ATOM	1253	CD2	LEU	323	6.187	-6.966	21.375	1.00	16.31
ATOM	1254	C	LEU	323	1.729	-6.742	21.595	1.00	11.07
ATOM	1255	O	LEU	323	1.523	-6.650	22.803	1.00	16.31
ATOM	1256	N	LEU	324	0.827	-6.413	20.677	1.00	13.48
ATOM	1257	CA	LEU	324	-0.494	-5.900	21.015	1.00	13.48
ATOM	1258	CB	LEU	324	-1.185	-5.383	19.752	1.00	15.92
ATOM	1259	CG	LEU	324	-2.607	-4.837	19.889	1.00	15.92
ATOM	1260	CD1	LEU	324	-2.602	-3.547	20.692	1.00	15.92
ATOM	1261	CD2	LEU	324	-3.182	-4.598	18.511	1.00	15.92
ATOM	1262	C	LEU	324	-1.393	-6.924	21.707	1.00	13.48
ATOM	1263	O	LEU	324	-1.896	-6.678	22.802	1.00	15.92
ATOM	1264	N	MET	325	-1.593	-8.074	21.072	1.00	11.47
ATOM	1265	CA	MET	325	-2.458	-9.111	21.631	1.00	11.47
ATOM	1266	CB	MET	325	-2.959	-10.043	20.520	1.00	22.90
ATOM	1267	CG	MET	325	-3.689	-9.347	19.375	1.00	22.90
ATOM	1268	SD	MET	325	-5.052	-8.287	19.908	1.00	22.90
ATOM	1269	CE	MET	325	-6.284	-9.475	20.353	1.00	22.90
ATOM	1270	C	MET	325	-1.814	-9.932	22.752	1.00	11.47
ATOM	1271	O	MET	325	-1.899	-11.160	22.758	1.00	22.90

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ATOM   1272  N   SER   326    -1.193  -9.256  23.711  1.00 30.07
ATOM   1273  CA  SER   326    -0.543  -9.936  24.826  1.00 30.07
ATOM   1274  CB  SER   326     0.723  -9.175  25.239  1.00 32.79
ATOM   1275  OG  SER   326     1.283  -9.699  26.433  1.00 32.79
ATOM   1276  C   SER   326    -1.492 -10.061  26.014  1.00 30.07
ATOM   1277  O   SER   326    -2.343  -9.198  26.235  1.00 32.79
ATOM   1278  N   THR   327    -1.347 -11.143  26.773  1.00 29.08
ATOM   1279  CA  THR   327    -2.179 -11.368  27.948  1.00 29.08
ATOM   1280  CB  THR   327    -2.705 -12.817  27.998  1.00 36.96
ATOM   1281  OG1 THR   327    -1.612 -13.734  27.856  1.00 36.96
ATOM   1282  CG2 THR   327    -3.716 -13.055  26.890  1.00 36.96
ATOM   1283  C   THR   327    -1.426 -11.049  29.239  1.00 29.08
ATOM   1284  O   THR   327    -1.930 -11.295  30.333  1.00 36.96
ATOM   1285  N   ASP   328    -0.214 -10.513  29.111  1.00 38.93
ATOM   1286  CA  ASP   328     0.596 -10.152  30.273  1.00 38.93
ATOM   1287  CB  ASP   328     2.082 -10.089  29.899  1.00 85.70
ATOM   1288  CG  ASP   328     2.660 -11.451  29.556  1.00 85.70
ATOM   1289  OD1 ASP   328     3.388 -11.554  28.542  1.00 85.70
ATOM   1290  OD2 ASP   328     2.393 -12.418  30.303  1.00 85.70
ATOM   1291  C   ASP   328     0.148  -8.810  30.845  1.00 38.93
ATOM   1292  O   ASP   328     0.962  -7.911  31.061  1.00 85.70
ATOM   1293  N   ARG   329    -1.154  -8.673  31.070  1.00 28.95
ATOM   1294  CA  ARG   329    -1.716  -7.445  31.608  1.00 28.95
ATOM   1295  CB  ARG   329    -2.390  -6.612  30.509  1.00 38.88
ATOM   1296  CG  ARG   329    -1.449  -5.887  29.554  1.00 38.88
ATOM   1297  CD  ARG   329    -1.107  -6.739  28.347  1.00 38.88
ATOM   1298  NE  ARG   329    -0.322  -6.005  27.356  1.00 38.88
ATOM   1299  CZ  ARG   329     1.006  -5.936  27.351  1.00 38.88
ATOM   1300  NH1 ARG   329     1.713  -6.552  28.290  1.00 38.88
ATOM   1301  NH2 ARG   329     1.631  -5.270  26.391  1.00 38.88
ATOM   1302  C   ARG   329    -2.745  -7.790  32.672  1.00 28.95
ATOM   1303  O   ARG   329    -3.279  -8.898  32.696  1.00 38.88
ATOM   1304  N   SER   330    -3.029  -6.829  33.542  1.00 42.07
ATOM   1305  CA  SER   330    -3.999  -7.025  34.607  1.00 42.07
ATOM   1306  CB  SER   330    -3.488  -6.399  35.899  1.00 37.35
ATOM   1307  C   SER   330    -5.340  -6.413  34.220  1.00 42.07
ATOM   1308  O   SER   330    -5.386  -5.382  33.550  1.00 37.35
ATOM   1309  N   GLY   331    -6.424  -7.085  34.598  1.00 26.57
ATOM   1310  CA  GLY   331    -7.754  -6.572  34.318  1.00 26.57
ATOM   1311  C   GLY   331    -8.404  -6.915  32.991  1.00 26.57
ATOM   1312  O   GLY   331    -9.462  -6.371  32.671  1.00 30.06
ATOM   1313  N   LEU   332    -7.797  -7.807  32.214  1.00 31.47
ATOM   1314  CA  LEU   332    -8.374  -8.189  30.928  1.00 31.47
ATOM   1315  CB  LEU   332    -7.351  -8.933  30.065  1.00 23.83
ATOM   1316  CG  LEU   332    -6.261  -8.076  29.425  1.00 23.83
ATOM   1317  CD1 LEU   332    -5.296  -8.960  28.652  1.00 23.83
ATOM   1318  CD2 LEU   332    -6.897  -7.041  28.509  1.00 23.83
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ATOM   1319  C   LEU   332      -9.630  -9.039  31.091  1.00 31.47
ATOM   1320  O   LEU   332      -9.665  -9.969  31.895  1.00 23.83
ATOM   1321  N   LEU   333     -10.659  -8.702  30.321  1.00 27.66
ATOM   1322  CA  LEU   333     -11.927  -9.422  30.351  1.00 27.66
ATOM   1323  CB  LEU   333     -13.072  -8.500  29.918  1.00 49.79
ATOM   1324  CG  LEU   333     -13.416  -7.312  30.820  1.00 49.79
ATOM   1325  CD1 LEU   333     -14.328  -6.339  30.083  1.00 49.79
ATOM   1326  CD2 LEU   333     -14.072  -7.803  32.104  1.00 49.79
ATOM   1327  C   LEU   333     -11.904 -10.663  29.456  1.00 27.66
ATOM   1328  O   LEU   333     -12.117 -11.780  29.919  1.00 49.79
ATOM   1329  N   CYS   334     -11.616 -10.464  28.174  1.00 29.56
ATOM   1330  CA  CYS   334     -11.583 -11.566  27.220  1.00 29.56
ATOM   1331  CB  CYS   334     -12.134 -11.106  25.865  1.00 47.01
ATOM   1332  SG  CYS   334     -13.888 -10.657  25.883  1.00 47.01
ATOM   1333  C   CYS   334     -10.187 -12.161  27.050  1.00 29.56
ATOM   1334  O   CYS   334      -9.652 -12.202  25.942  1.00 47.01
ATOM   1335  N   VAL   335      -9.617 -12.655  28.147  1.00 30.69
ATOM   1336  CA  VAL   335      -8.280 -13.250  28.132  1.00 30.69
ATOM   1337  CB  VAL   335      -7.913 -13.844  29.514  1.00 32.18
ATOM   1338  CG1 VAL   335      -6.517 -14.456  29.480  1.00 32.18
ATOM   1339  CG2 VAL   335      -7.988 -12.768  30.584  1.00 32.18
ATOM   1340  C   VAL   335      -8.120 -14.340  27.068  1.00 30.69
ATOM   1341  O   VAL   335      -7.149 -14.337  26.309  1.00 32.18
ATOM   1342  N   ASP   336      -9.079 -15.260  27.012  1.00 30.13
ATOM   1343  CA  ASP   336      -9.040 -16.360  26.052  1.00 30.13
ATOM   1344  CB  ASP   336     -10.218 -17.311  26.284  1.00 63.22
ATOM   1345  CG  ASP   336     -10.178 -18.528  25.370  1.00 63.22
ATOM   1346  OD1 ASP   336     -11.119 -18.700  24.565  1.00 63.22
ATOM   1347  OD2 ASP   336      -9.205 -19.311  25.452  1.00 63.22
ATOM   1348  C   ASP   336      -9.012 -15.903  24.594  1.00 30.13
ATOM   1349  O   ASP   336      -8.156 -16.339  23.823  1.00 63.22
ATOM   1350  N   LYS   337      -9.944 -15.027  24.223  1.00 26.63
ATOM   1351  CA  LYS   337     -10.024 -14.515  22.856  1.00 26.63
ATOM   1352  CB  LYS   337     -11.172 -13.516  22.729  1.00 21.38
ATOM   1353  C   LYS   337      -8.706 -13.865  22.438  1.00 26.63
ATOM   1354  O   LYS   337      -8.204 -14.110  21.338  1.00 21.38
ATOM   1355  N   ILE   338      -8.141 -13.060  23.334  1.00 24.65
ATOM   1356  CA  ILE   338      -6.879 -12.376  23.078  1.00 24.65
ATOM   1357  CB  ILE   338      -6.543 -11.380  24.215  1.00 20.45
ATOM   1358  CG2 ILE   338      -5.198 -10.719  23.966  1.00 20.45
ATOM   1359  CG1 ILE   338      -7.632 -10.308  24.308  1.00 20.45
ATOM   1360  CD1 ILE   338      -7.479  -9.374  25.486  1.00 20.45
ATOM   1361  C   ILE   338      -5.744 -13.388  22.911  1.00 24.65
ATOM   1362  O   ILE   338      -4.948 -13.288  21.974  1.00 20.45
ATOM   1363  N   GLU   339      -5.700 -14.383  23.795  1.00 35.34
ATOM   1364  CA  GLU   339      -4.673 -15.422  23.745  1.00 35.34
ATOM   1365  CB  GLU   339      -4.836 -16.388  24.916  1.00 29.51
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ATOM	1366	C	GLU	339	-4.744	-16.180	22.421	1.00	35.34
ATOM	1367	O	GLU	339	-3.720	-16.421	21.777	1.00	29.51
ATOM	1368	N	LYS	340	-5.959	-16.536	22.009	1.00	24.19
ATOM	1369	CA	LYS	340	-6.168	-17.256	20.755	1.00	24.19
ATOM	1370	CB	LYS	340	-7.627	-17.671	20.624	1.00	23.97
ATOM	1371	C	LYS	340	-5.754	-16.377	19.576	1.00	24.19
ATOM	1372	O	LYS	340	-5.197	-16.860	18.586	1.00	23.97
ATOM	1373	N	SER	341	-6.000	-15.079	19.708	1.00	16.85
ATOM	1374	CA	SER	341	-5.651	-14.115	18.676	1.00	16.85
ATOM	1375	CB	SER	341	-6.223	-12.744	19.033	1.00	26.59
ATOM	1376	OG	SER	341	-5.852	-11.765	18.080	1.00	26.59
ATOM	1377	C	SER	341	-4.137	-14.026	18.500	1.00	16.85
ATOM	1378	O	SER	341	-3.638	-14.042	17.374	1.00	26.59
ATOM	1379	N	GLN	342	-3.406	-13.932	19.608	1.00	17.35
ATOM	1380	CA	GLN	342	-1.952	-13.845	19.537	1.00	17.35
ATOM	1381	CB	GLN	342	-1.337	-13.597	20.913	1.00	30.07
ATOM	1382	CG	GLN	342	0.140	-13.245	20.832	1.00	30.07
ATOM	1383	CD	GLN	342	0.811	-13.196	22.182	1.00	30.07
ATOM	1384	OE1	GLN	342	0.884	-14.201	22.884	1.00	30.07
ATOM	1385	NE2	GLN	342	1.318	-12.030	22.548	1.00	30.07
ATOM	1386	C	GLN	342	-1.368	-15.118	18.944	1.00	17.35
ATOM	1387	O	GLN	342	-0.405	-15.066	18.178	1.00	30.07
ATOM	1388	N	GLU	343	-1.949	-16.260	19.303	1.00	18.35
ATOM	1389	CA	GLU	343	-1.489	-17.546	18.791	1.00	18.35
ATOM	1390	CB	GLU	343	-2.308	-18.676	19.394	1.00	16.98
ATOM	1391	C	GLU	343	-1.603	-17.560	17.267	1.00	18.35
ATOM	1392	O	GLU	343	-0.699	-18.026	16.568	1.00	16.98
ATOM	1393	N	ALA	344	-2.706	-17.017	16.761	1.00	14.83
ATOM	1394	CA	ALA	344	-2.946	-16.948	15.324	1.00	14.83
ATOM	1395	CB	ALA	344	-4.327	-16.376	15.049	1.00	19.42
ATOM	1396	C	ALA	344	-1.872	-16.102	14.640	1.00	14.83
ATOM	1397	O	ALA	344	-1.311	-16.507	13.619	1.00	19.42
ATOM	1398	N	TYR	345	-1.586	-14.934	15.211	1.00	13.10
ATOM	1399	CA	TYR	345	-0.569	-14.041	14.665	1.00	13.10
ATOM	1400	CB	TYR	345	-0.573	-12.697	15.393	1.00	2.00
ATOM	1401	CG	TYR	345	-1.670	-11.767	14.938	1.00	2.00
ATOM	1402	CD1	TYR	345	-2.707	-11.409	15.794	1.00	2.00
ATOM	1403	CE1	TYR	345	-3.722	-10.562	15.377	1.00	2.00
ATOM	1404	CD2	TYR	345	-1.674	-11.248	13.647	1.00	2.00
ATOM	1405	CE2	TYR	345	-2.683	-10.398	13.219	1.00	2.00
ATOM	1406	CZ	TYR	345	-3.706	-10.061	14.087	1.00	2.00
ATOM	1407	OH	TYR	345	-4.722	-9.233	13.669	1.00	2.00
ATOM	1408	C	TYR	345	0.818	-14.666	14.732	1.00	13.10
ATOM	1409	O	TYR	345	1.614	-14.504	13.811	1.00	2.00
ATOM	1410	N	LEU	346	1.101	-15.387	15.813	1.00	12.59
ATOM	1411	CA	LEU	346	2.396	-16.041	15.976	1.00	12.59
ATOM	1412	CB	LEU	346	2.498	-16.715	17.347	1.00	22.61

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ATOM   1413 CG  LEU   346      2.899 -15.799 18.504  1.00 22.61
ATOM   1414 CD1 LEU   346      2.717 -16.511 19.830  1.00 22.61
ATOM   1415 CD2 LEU   346      4.341 -15.357 18.324  1.00 22.61
ATOM   1416 C   LEU   346      2.629 -17.057 14.865  1.00 12.59
ATOM   1417 O   LEU   346      3.706 -17.099 14.272  1.00 22.61
ATOM   1418 N   LEU   347      1.612 -17.862 14.574  1.00 18.42
ATOM   1419 CA  LEU   347      1.706 -18.863 13.517  1.00 18.42
ATOM   1420 CB  LEU   347      0.471 -19.762 13.512  1.00 23.56
ATOM   1421 CG  LEU   347      0.509 -20.965 14.456  1.00 23.56
ATOM   1422 CD1 LEU   347     -0.819 -21.702 14.398  1.00 23.56
ATOM   1423 CD2 LEU   347      1.659 -21.890 14.068  1.00 23.56
ATOM   1424 C   LEU   347      1.870 -18.201 12.154  1.00 18.42
ATOM   1425 O   LEU   347      2.672 -18.651 11.330  1.00 23.56
ATOM   1426 N   ALA   348      1.099 -17.144 11.917  1.00 12.49
ATOM   1427 CA  ALA   348      1.157 -16.403 10.663  1.00 12.49
ATOM   1428 CB  ALA   348      0.098 -15.302 10.654  1.00 14.77
ATOM   1429 C   ALA   348      2.545 -15.798 10.504  1.00 12.49
ATOM   1430 O   ALA   348      3.154 -15.874  9.436  1.00 14.77
ATOM   1431 N   PHE   349      3.048 -15.246 11.602  1.00 15.52
ATOM   1432 CA  PHE   349      4.357 -14.613 11.664  1.00 15.52
ATOM   1433 CB  PHE   349      4.566 -14.049 13.076  1.00 14.41
ATOM   1434 CG  PHE   349      5.714 -13.085 13.203  1.00 14.41
ATOM   1435 CD1 PHE   349      6.473 -12.712 12.099  1.00 14.41
ATOM   1436 CD2 PHE   349      6.027 -12.540 14.443  1.00 14.41
ATOM   1437 CE1 PHE   349      7.523 -11.813 12.230  1.00 14.41
ATOM   1438 CE2 PHE   349      7.075 -11.640 14.584  1.00 14.41
ATOM   1439 CZ  PHE   349      7.825 -11.275 13.475  1.00 14.41
ATOM   1440 C   PHE   349      5.444 -15.633 11.324  1.00 15.52
ATOM   1441 O   PHE   349      6.252 -15.413 10.422  1.00 14.41
ATOM   1442 N   GLU   350      5.439 -16.760 12.026  1.00 13.20
ATOM   1443 CA  GLU   350      6.424 -17.811 11.801  1.00 13.20
ATOM   1444 CB  GLU   350      6.152 -18.995 12.734  1.00 33.43
ATOM   1445 CG  GLU   350      7.068 -20.193 12.519  1.00 33.43
ATOM   1446 CD  GLU   350      6.786 -21.331 13.482  1.00 33.43
ATOM   1447 OE1 GLU   350      7.746 -22.035 13.857  1.00 33.43
ATOM   1448 OE2 GLU   350      5.611 -21.525 13.865  1.00 33.43
ATOM   1449 C   GLU   350      6.409 -18.283 10.352  1.00 13.20
ATOM   1450 O   GLU   350      7.449 -18.355  9.694  1.00 33.43
ATOM   1451 N   HIS   351      5.217 -18.573  9.850  1.00 19.10
ATOM   1452 CA  HIS   351      5.062 -19.051  8.485  1.00 19.10
ATOM   1453 CB  HIS   351      3.632 -19.536  8.256  1.00 18.97
ATOM   1454 CG  HIS   351      3.249 -20.700  9.117  1.00 18.97
ATOM   1455 CD2 HIS   351      3.987 -21.474  9.948  1.00 18.97
ATOM   1456 ND1 HIS   351      1.960 -21.180  9.194  1.00 18.97
ATOM   1457 CE1 HIS   351      1.918 -22.195 10.039  1.00 18.97
ATOM   1458 NE2 HIS   351      3.134 -22.394 10.509  1.00 18.97
ATOM   1459 C   HIS   351      5.477 -18.011  7.449  1.00 19.10
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ATOM   1460  O   HIS   351      5.955 -18.366   6.371  1.00 18.97
ATOM   1461  N   TYR   352      5.304 -16.732   7.767  1.00  9.38
ATOM   1462  CA  TYR   352      5.711 -15.683   6.843  1.00  9.38
ATOM   1463  CB  TYR   352      5.168 -14.317   7.257  1.00 16.06
ATOM   1464  CG  TYR   352      5.539 -13.238   6.268  1.00 16.06
ATOM   1465  CD1 TYR   352      4.939 -13.190   5.008  1.00 16.06
ATOM   1466  CE1 TYR   352      5.321 -12.242   4.060  1.00 16.06
ATOM   1467  CD2 TYR   352      6.531 -12.303   6.562  1.00 16.06
ATOM   1468  CE2 TYR   352      6.923 -11.349   5.620  1.00 16.06
ATOM   1469  CZ  TYR   352      6.313 -11.326   4.371  1.00 16.06
ATOM   1470  OH  TYR   352      6.710 -10.401   3.431  1.00 16.06
ATOM   1471  C   TYR   352      7.234 -15.639   6.812  1.00  9.38
ATOM   1472  O   TYR   352      7.838 -15.475   5.751  1.00 16.06
ATOM   1473  N   VAL   353      7.851 -15.789   7.980  1.00 15.38
ATOM   1474  CA  VAL   353      9.305 -15.790   8.087  1.00 15.38
ATOM   1475  CB  VAL   353      9.761 -15.945   9.558  1.00 18.40
ATOM   1476  CG1 VAL   353     11.262 -16.163   9.633  1.00 18.40
ATOM   1477  CG2 VAL   353      9.384 -14.703  10.349  1.00 18.40
ATOM   1478  C   VAL   353      9.853 -16.938   7.237  1.00 15.38
ATOM   1479  O   VAL   353     10.850 -16.773   6.525  1.00 18.40
ATOM   1480  N   ASN   354      9.183 -18.086   7.298  1.00 14.74
ATOM   1481  CA  ASN   354      9.578 -19.259   6.521  1.00 14.74
ATOM   1482  CB  ASN   354      8.640 -20.435   6.799  1.00 19.97
ATOM   1483  CG  ASN   354      8.832 -21.020   8.180  1.00 19.97
ATOM   1484  OD1 ASN   354      9.879 -20.848   8.799  1.00 19.97
ATOM   1485  ND2 ASN   354      7.826 -21.734   8.664  1.00 19.97
ATOM   1486  C   ASN   354      9.550 -18.939   5.034  1.00 14.74
ATOM   1487  O   ASN   354     10.452 -19.319   4.290  1.00 19.97
ATOM   1488  N   HIS   355      8.507 -18.230   4.613  1.00 13.03
ATOM   1489  CA  HIS   355      8.329 -17.837   3.220  1.00 13.03
ATOM   1490  CB  HIS   355      6.960 -17.164   3.042  1.00 24.39
ATOM   1491  CG  HIS   355      6.753 -16.541   1.695  1.00 24.39
ATOM   1492  CD2 HIS   355      7.195 -15.370   1.176  1.00 24.39
ATOM   1493  ND1 HIS   355      6.009 -17.138   0.701  1.00 24.39
ATOM   1494  CE1 HIS   355      6.005 -16.368  -0.372  1.00 24.39
ATOM   1495  NE2 HIS   355      6.720 -15.289  -0.107  1.00 24.39
ATOM   1496  C   HIS   355      9.434 -16.894   2.758  1.00 13.03
ATOM   1497  O   HIS   355      9.834 -16.920   1.595  1.00 24.39
ATOM   1498  N   ARG   356      9.878 -16.027   3.660  1.00 19.55
ATOM   1499  CA  ARG   356     10.920 -15.054   3.358  1.00 19.55
ATOM   1500  CB  ARG   356     10.970 -14.001   4.460  1.00 22.01
ATOM   1501  CG  ARG   356      9.772 -13.081   4.454  1.00 22.01
ATOM   1502  CD  ARG   356     10.097 -11.784   3.750  1.00 22.01
ATOM   1503  NE  ARG   356     10.932 -10.934   4.592  1.00 22.01
ATOM   1504  CZ  ARG   356     11.822 -10.059   4.137  1.00 22.01
ATOM   1505  NH1 ARG   356     12.010  -9.907   2.833  1.00 22.01
ATOM   1506  NH2 ARG   356     12.519  -9.325   4.992  1.00 22.01
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ATOM   1507 C   ARG  356    12.297 -15.675  3.158  1.00 19.55
ATOM   1508 O   ARG  356    13.127 -15.126  2.434  1.00 22.01
ATOM   1509 N   LYS  357    12.547 -16.788  3.841  1.00 23.18
ATOM   1510 CA  LYS  357    13.815 -17.504  3.739  1.00 23.18
ATOM   1511 CB  LYS  357    13.879 -18.273  2.415  1.00 42.91
ATOM   1512 CG  LYS  357    12.750 -19.277  2.274  1.00 42.91
ATOM   1513 CD  LYS  357    12.773 -20.021  0.960  1.00 42.91
ATOM   1514 CE  LYS  357    11.619 -21.011  0.913  1.00 42.91
ATOM   1515 NZ  LYS  357    11.629 -21.845 -0.316  1.00 42.91
ATOM   1516 C   LYS  357    15.047 -16.619  3.918  1.00 23.18
ATOM   1517 O   LYS  357    15.816 -16.396  2.982  1.00 42.91
ATOM   1518 N   HIS  358    15.228 -16.122  5.137  1.00 32.39
ATOM   1519 CA  HIS  358    16.367 -15.272  5.460  1.00 32.39
ATOM   1520 CB  HIS  358    16.181 -14.626  6.835  1.00 26.77
ATOM   1521 CG  HIS  358    15.232 -13.468  6.841  1.00 26.77
ATOM   1522 CD2 HIS  358    15.452 -12.138  6.709  1.00 26.77
ATOM   1523 ND1 HIS  358    13.875 -13.615  7.028  1.00 26.77
ATOM   1524 CE1 HIS  358    13.300 -12.426  7.012  1.00 26.77
ATOM   1525 NE2 HIS  358    14.234 -11.513  6.821  1.00 26.77
ATOM   1526 C   HIS  358    17.633 -16.115  5.480  1.00 32.39
ATOM   1527 O   HIS  358    17.618 -17.248  5.961  1.00 26.77
ATOM   1528 N   ASN  359    18.728 -15.561  4.972  1.00 41.97
ATOM   1529 CA  ASN  359    20.000 -16.273  4.959  1.00 41.97
ATOM   1530 CB  ASN  359    20.909 -15.716  3.863  1.00 46.84
ATOM   1531 C   ASN  359    20.663 -16.134  6.331  1.00 41.97
ATOM   1532 O   ASN  359    21.821 -15.731  6.436  1.00 46.84
ATOM   1533 N   ILE  360    19.908 -16.450  7.379  1.00 35.72
ATOM   1534 CA  ILE  360    20.394 -16.359  8.753  1.00 35.72
ATOM   1535 CB  ILE  360    19.819 -15.113  9.480  1.00 36.14
ATOM   1536 CG2 ILE  360    20.327 -15.050 10.918  1.00 36.14
ATOM   1537 CG1 ILE  360    20.204 -13.833  8.734  1.00 36.14
ATOM   1538 CD1 ILE  360    19.526 -12.591  9.265  1.00 36.14
ATOM   1539 C   ILE  360    19.935 -17.611  9.493  1.00 35.72
ATOM   1540 O   ILE  360    18.748 -17.953  9.479  1.00 36.14
ATOM   1541 N   PRO  361    20.877 -18.338 10.109  1.00 31.56
ATOM   1542 CD  PRO  361    22.334 -18.114 10.100  1.00 33.50
ATOM   1543 CA  PRO  361    20.532 -19.556 10.847  1.00 31.56
ATOM   1544 CB  PRO  361    21.901 -20.163 11.161  1.00 33.50
ATOM   1545 CG  PRO  361    22.801 -18.967 11.249  1.00 33.50
ATOM   1546 C   PRO  361    19.743 -19.256 12.121  1.00 31.56
ATOM   1547 O   PRO  361    20.080 -18.338 12.867  1.00 33.50
ATOM   1548 N   HIS  362    18.688 -20.034 12.355  1.00 18.84
ATOM   1549 CA  HIS  362    17.840 -19.887 13.541  1.00 18.84
ATOM   1550 CB  HIS  362    18.656 -20.151 14.812  1.00 31.38
ATOM   1551 CG  HIS  362    19.540 -21.357 14.731  1.00 31.38
ATOM   1552 CD2 HIS  362    19.250 -22.667 14.537  1.00 31.38
ATOM   1553 ND1 HIS  362    20.910 -21.286 14.860  1.00 31.38
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ATOM   1554  CE1 HIS   362     21.427 -22.497  14.754  1.00 31.38
ATOM   1555  NE2 HIS   362     20.439 -23.353  14.558  1.00 31.38
ATOM   1556  C   HIS   362     17.189 -18.506  13.628  1.00 18.84
ATOM   1557  O   HIS   362     16.980 -17.979  14.723  1.00 31.38
ATOM   1558  N   PHE   363     16.825 -17.950  12.476  1.00 18.69
ATOM   1559  CA  PHE   363     16.209 -16.630  12.408  1.00 18.69
ATOM   1560  CB  PHE   363     15.825 -16.302  10.962  1.00 19.25
ATOM   1561  CG  PHE   363     15.339 -14.894  10.765  1.00 19.25
ATOM   1562  CD1 PHE   363     16.239 -13.862  10.530  1.00 19.25
ATOM   1563  CD2 PHE   363     13.981 -14.598  10.819  1.00 19.25
ATOM   1564  CE1 PHE   363     15.794 -12.556  10.351  1.00 19.25
ATOM   1565  CE2 PHE   363     13.527 -13.296  10.642  1.00 19.25
ATOM   1566  CZ  PHE   363     14.435 -12.273  10.407  1.00 19.25
ATOM   1567  C   PHE   363     14.995 -16.461  13.323  1.00 18.69
ATOM   1568  O   PHE   363     14.955 -15.540  14.138  1.00 19.25
ATOM   1569  N   TRP   364     14.016 -17.351  13.191  1.00 16.46
ATOM   1570  CA  TRP   364     12.797 -17.280  13.995  1.00 16.46
ATOM   1571  CB  TRP   364     11.882 -18.482  13.706  1.00 17.81
ATOM   1572  CG  TRP   364     10.588 -18.488  14.481  1.00 17.81
ATOM   1573  CD2 TRP   364      9.586 -17.458  14.504  1.00 17.81
ATOM   1574  CE2 TRP   364      8.547 -17.905  15.350  1.00 17.81
ATOM   1575  CE3 TRP   364      9.467 -16.202  13.894  1.00 17.81
ATOM   1576  CD1 TRP   364     10.126 -19.486  15.290  1.00 17.81
ATOM   1577  NE1 TRP   364      8.902 -19.144  15.814  1.00 17.81
ATOM   1578  CZ2 TRP   364      7.403 -17.142  15.602  1.00 17.81
ATOM   1579  CZ3 TRP   364      8.329 -15.444  14.145  1.00 17.81
ATOM   1580  CH2 TRP   364      7.312 -15.919  14.992  1.00 17.81
ATOM   1581  C   TRP   364     13.046 -17.114  15.500  1.00 16.46
ATOM   1582  O   TRP   364     12.595 -16.133  16.087  1.00 17.81
ATOM   1583  N   PRO   365     13.779 -18.051  16.137  1.00 18.31
ATOM   1584  CD  PRO   365     14.342 -19.314  15.625  1.00 25.61
ATOM   1585  CA  PRO   365     14.038 -17.920  17.577  1.00 18.31
ATOM   1586  CB  PRO   365     14.939 -19.118  17.874  1.00 25.61
ATOM   1587  CG  PRO   365     14.500 -20.130  16.882  1.00 25.61
ATOM   1588  C   PRO   365     14.732 -16.606  17.933  1.00 18.31
ATOM   1589  O   PRO   365     14.387 -15.963  18.926  1.00 25.61
ATOM   1590  N   LYS   366     15.699 -16.207  17.112  1.00 25.16
ATOM   1591  CA  LYS   366     16.439 -14.968  17.338  1.00 25.16
ATOM   1592  CB  LYS   366     17.537 -14.805  16.289  1.00 40.51
ATOM   1593  CG  LYS   366     18.679 -15.792  16.417  1.00 40.51
ATOM   1594  CD  LYS   366     19.664 -15.607  15.278  1.00 40.51
ATOM   1595  CE  LYS   366     20.884 -16.492  15.440  1.00 40.51
ATOM   1596  NZ  LYS   366     21.800 -16.360  14.275  1.00 40.51
ATOM   1597  C   LYS   366     15.521 -13.747  17.317  1.00 25.16
ATOM   1598  O   LYS   366     15.593 -12.893  18.202  1.00 40.51
ATOM   1599  N   LEU   367     14.661 -13.666  16.307  1.00 25.30
ATOM   1600  CA  LEU   367     13.729 -12.551  16.184  1.00 25.30
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ATOM   1601  CB  LEU   367      12.989 -12.620  14.845  1.00 27.80
ATOM   1602  CG  LEU   367      11.964 -11.519  14.561  1.00 27.80
ATOM   1603  CD1 LEU   367      12.621 -10.147  14.679  1.00 27.80
ATOM   1604  CD2 LEU   367      11.367 -11.724  13.175  1.00 27.80
ATOM   1605  C   LEU   367      12.730 -12.596  17.332  1.00 25.30
ATOM   1606  O˙  LEU   367      12.337 -11.563  17.877  1.00 27.80
ATOM   1607  N   LEU   368      12.345 -13.807  17.712  1.00 26.12
ATOM   1608  CA  LEU   368      11.396 -14.019  18.793  1.00 26.12
ATOM   1609  CB  LEU   368      11.105 -15.515  18.919  1.00 33.27
ATOM   1610  CG  LEU   368       9.696 -15.976  19.289  1.00 33.27
ATOM   1611  CD1 LEU   368       8.640 -15.182  18.529  1.00 33.27
ATOM   1612  CD2 LEU   368       9.582 -17.460  18.976  1.00 33.27
ATOM   1613  C   LEU   368      11.973 -13.466  20.096  1.00 26.12
ATOM   1614  O   LEU   368      11.249 -12.920  20.930  1.00 33.27
ATOM   1615  N   MET   369      13.289 -13.571  20.244  1.00 24.39
ATOM   1616  CA  MET   369      13.971 -13.076  21.432  1.00 24.39
ATOM   1617  CB  MET   369      15.382 -13.656  21.511  1.00 47.44
ATOM   1618  CG  MET   369      15.407 -15.096  22.009  1.00 47.44
ATOM   1619  SD  MET   369      16.850 -16.029  21.464  1.00 47.44
ATOM   1620  CE  MET   369      18.186 -15.114  22.246  1.00 47.44
ATOM   1621  C   MET   369      13.996 -11.552  21.491  1.00 24.39
ATOM   1622  O   MET   369      14.212 -10.971  22.557  1.00 47.44
ATOM   1623  N   LYS   370      13.749 -10.904  20.354  1.00 27.31
ATOM   1624  CA  LYS   370      13.713  -9.445  20.297  1.00 27.31
ATOM   1625  CB  LYS   370      13.739  -8.951  18.847  1.00 28.20
ATOM   1626  CG  LYS   370      15.004  -9.312  18.090  1.00 28.20
ATOM   1627  CD  LYS   370      16.231  -8.810  18.824  1.00 28.20
ATOM   1628  CE  LYS   370      17.512  -9.244  18.142  1.00 28.20
ATOM   1629  NZ  LYS   370      18.696  -8.851  18.952  1.00 28.20
ATOM   1630  C   LYS   370      12.453  -8.945  21.002  1.00 27.31
ATOM   1631  O   LYS   370      12.424  -7.835  21.535  1.00 28.20
ATOM   1632  N   VAL   371      11.413  -9.776  21.009  1.00 26.41
ATOM   1633  CA  VAL   371      10.157  -9.432  21.668  1.00 26.41
ATOM   1634  CB  VAL   371       9.109 -10.561  21.512  1.00 25.61
ATOM   1635  CG1 VAL   371       7.825 -10.205  22.245  1.00 25.61
ATOM   1636  CG2 VAL   371       8.819 -10.805  20.044  1.00 25.61
ATOM   1637  C   VAL   371      10.450  -9.205  23.151  1.00 26.41
ATOM   1638  O   VAL   371       9.962  -8.248  23.752  1.00 25.61
ATOM   1639  N   THR   372      11.294 -10.065  23.713  1.00 26.28
ATOM   1640  CA  THR   372      11.683  -9.972  25.116  1.00 26.28
ATOM   1641  CB  THR   372      12.656 -11.109  25.500  1.00 28.14
ATOM   1642  OG1 THR   372      12.025 -12.377  25.275  1.00 28.14
ATOM   1643  CG2 THR   372      13.055 -11.001  26.965  1.00 28.14
ATOM   1644  C   THR   372      12.358  -8.624  25.372  1.00 26.28
ATOM   1645  O   THR   372      12.047  -7.937  26.350  1.00 28.14
ATOM   1646  N   ASP   373      13.269  -8.247  24.478  1.00 15.09
ATOM   1647  CA  ASP   373      13.977  -6.979  24.588  1.00 15.09
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ATOM	1648	CB	ASP	373	14.976	-6.822	23.435	1.00	37.94
ATOM	1649	CG	ASP	373	16.065	-7.893	23.445	1.00	37.94
ATOM	1650	OD1	ASP	373	16.248	-8.571	24.483	1.00	37.94
ATOM	1651	OD2	ASP	373	16.750	-8.052	22.410	1.00	37.94
ATOM	1652	C	ASP	373	12.969	-5.833	24.577	1.00	15.09
ATOM	1653	O˙	ASP	373	13.040	-4.928	25.407	1.00	37.94
ATOM	1654	N	LEU	374	12.008	-5.901	23.659	1.00	17.04
ATOM	1655	CA	LEU	374	10.974	-4.880	23.549	1.00	17.04
ATOM	1656	CB	LEU	374	10.071	-5.155	22.344	1.00	20.58
ATOM	1657	CG	LEU	374	10.624	-4.720	20.985	1.00	20.58
ATOM	1658	CD1	LEU	374	9.826	-5.352	19.862	1.00	20.58
ATOM	1659	CD2	LEU	374	10.599	-3.202	20.882	1.00	20.58
ATOM	1660	C	LEU	374	10.145	-4.786	24.825	1.00	17.04
ATOM	1661	O	LEU	374	9.783	-3.688	25.256	1.00	20.58
ATOM	1662	N	ARG	375	9.850	-5.935	25.430	1.00	20.46
ATOM	1663	CA	ARG	375	9.080	-5.977	26.673	1.00	20.46
ATOM	1664	CB	ARG	375	8.873	-7.422	27.140	1.00	55.89
ATOM	1665	CG	ARG	375	8.180	-8.354	26.152	1.00	55.89
ATOM	1666	CD	ARG	375	6.692	-8.084	26.027	1.00	55.89
ATOM	1667	NE	ARG	375	5.943	-9.338	25.968	1.00	55.89
ATOM	1668	CZ	ARG	375	5.054	-9.654	25.028	1.00	55.89
ATOM	1669	NH1	ARG	375	4.782	-8.808	24.040	1.00	55.89
ATOM	1670	NH2	ARG	375	4.438	-10.829	25.073	1.00	55.89
ATOM	1671	C	ARG	375	9.874	-5.221	27.735	1.00	20.46
ATOM	1672	O	ARG	375	9.328	-4.391	28.463	1.00	55.89
ATOM	1673	N	MET	376	11.174	-5.502	27.794	1.00	20.10
ATOM	1674	CA	MET	376	12.076	-4.863	28.744	1.00	20.10
ATOM	1675	CB	MET	376	13.493	-5.417	28.580	1.00	63.73
ATOM	1676	CG	MET	376	13.956	-6.310	29.722	1.00	63.73
ATOM	1677	SD	MET	376	14.494	-5.373	31.182	1.00	63.73
ATOM	1678	CE	MET	376	12.934	-5.151	32.087	1.00	63.73
ATOM	1679	C	MET	376	12.081	-3.347	28.566	1.00	20.10
ATOM	1680	O	MET	376	11.973	-2.602	29.539	1.00	63.73
ATOM	1681	N	ILE	377	12.194	-2.896	27.321	1.00	30.02
ATOM	1682	CA	ILE	377	12.198	-1.469	27.014	1.00	30.02
ATOM	1683	CB	ILE	377	12.329	-1.228	25.488	1.00	19.31
ATOM	1684	CG2	ILE	377	12.088	0.242	25.152	1.00	19.31
ATOM	1685	CG1	ILE	377	13.711	-1.685	25.011	1.00	19.31
ATOM	1686	CD1	ILE	377	13.906	-1.634	23.507	1.00	19.31
ATOM	1687	C	ILE	377	10.915	-0.821	27.542	1.00	30.02
ATOM	1688	O	ILE	377	10.962	0.216	28.211	1.00	19.31
ATOM	1689	N	GLY	378	9.779	-1.455	27.266	1.00	21.85
ATOM	1690	CA	GLY	378	8.505	-0.936	27.729	1.00	21.85
ATOM	1691	C	GLY	378	8.459	-0.821	29.243	1.00	21.85
ATOM	1692	O	GLY	378	7.990	0.185	29.779	1.00	34.01
ATOM	1693	N	ALA	379	8.967	-1.842	29.928	1.00	31.30
ATOM	1694	CA	ALA	379	8.996	-1.870	31.388	1.00	31.30

ATOM	1695	CB	ALA	379	9.471	-3.231	31.880	1.00	30.06
ATOM	1696	C	ALA	379	9.895	-0.763	31.938	1.00	31.30
ATOM	1697	O	ALA	379	9.482	0.002	32.810	1.00	30.06
ATOM	1698	N	CYS	380	11.117	-0.677	31.418	1.00	28.61
ATOM	1699	CA	CYS	380	12.067	0.349	31.841	1.00	28.61
ATOM	1700	CB	CYS	380	13.360	0.268	31.025	1.00	60.26
ATOM	1701	SG	CYS	380	14.499	-1.067	31.470	1.00	60.26
ATOM	1702	C	CYS	380	11.449	1.730	31.658	1.00	28.61
ATOM	1703	O	CYS	380	11.516	2.573	32.554	1.00	60.26
ATOM	1704	N	HIS	381	10.840	1.957	30.498	1.00	30.42
ATOM	1705	CA	HIS	381	10.212	3.243	30.216	1.00	30.42
ATOM	1706	CB	HIS	381	9.696	3.306	28.779	1.00	16.49
ATOM	1707	CG	HIS	381	8.942	4.562	28.472	1.00	16.49
ATOM	1708	CD2	HIS	381	9.370	5.805	28.151	1.00	16.49
ATOM	1709	ND1	HIS	381	7.566	4.633	28.524	1.00	16.49
ATOM	1710	CE1	HIS	381	7.180	5.866	28.251	1.00	16.49
ATOM	1711	NE2	HIS	381	8.255	6.596	28.021	1.00	16.49
ATOM	1712	C	HIS	381	9.073	3.539	31.182	1.00	30.42
ATOM	1713	O	HIS	381	8.856	4.690	31.552	1.00	16.49
ATOM	1714	N	ALA	382	8.330	2.506	31.564	1.00	22.89
ATOM	1715	CA	ALA	382	7.218	2.666	32.493	1.00	22.89
ATOM	1716	CB	ALA	382	6.520	1.336	32.708	1.00	34.50
ATOM	1717	C	ALA	382	7.738	3.213	33.819	1.00	22.89
ATOM	1718	O	ALA	382	7.219	4.200	34.343	1.00	34.50
ATOM	1719	N	SER	383	8.789	2.586	34.336	1.00	26.39
ATOM	1720	CA	SER	383	9.400	3.006	35.591	1.00	26.39
ATOM	1721	CB	SER	383	10.510	2.030	35.985	1.00	52.94
ATOM	1722	OG	SER	383	10.015	0.702	36.046	1.00	52.94
ATOM	1723	C	SER	383	9.966	4.418	35.470	1.00	26.39
ATOM	1724	O	SER	383	9.772	5.253	36.357	1.00	52.94
ATOM	1725	N	ARG	384	10.662	4.683	34.368	1.00	30.36
ATOM	1726	CA	ARG	384	11.249	5.995	34.134	1.00	30.36
ATOM	1727	CB	ARG	384	12.116	5.977	32.874	1.00	37.39
ATOM	1728	CG	ARG	384	12.601	7.344	32.431	1.00	37.39
ATOM	1729	CD	ARG	384	14.070	7.321	32.060	1.00	37.39
ATOM	1730	NE	ARG	384	14.935	7.597	33.204	1.00	37.39
ATOM	1731	CZ	ARG	384	15.750	8.646	33.291	1.00	37.39
ATOM	1732	NH1	ARG	384	15.824	9.529	32.303	1.00	37.39
ATOM	1733	NH2	ARG	384	16.488	8.819	34.376	1.00	37.39
ATOM	1734	C	ARG	384	10.169	7.067	34.030	1.00	30.36
ATOM	1735	O	ARG	384	10.301	8.144	34.616	1.00	37.39
ATOM	1736	N	PHE	385	9.078	6.749	33.338	1.00	24.47
ATOM	1737	CA	PHE	385	7.980	7.693	33.171	1.00	24.47
ATOM	1738	CB	PHE	385	6.859	7.092	32.319	1.00	28.70
ATOM	1739	CG	PHE	385	5.710	8.036	32.075	1.00	28.70
ATOM	1740	CD1	PHE	385	5.795	9.017	31.092	1.00	28.70
ATOM	1741	CD2	PHE	385	4.549	7.954	32.836	1.00	28.70

ATOM	1742	CE1	PHE	385	4.740	9.903	30.874	1.00	28.70
ATOM	1743	CE2	PHE	385	3.491	8.835	32.624	1.00	28.70
ATOM	1744	CZ	PHE	385	3.587	9.812	31.641	1.00	28.70
ATOM	1745	C	PHE	385	7.436	8.097	34.533	1.00	24.47
ATOM	1746	O	PHE	385	7.250	9.285	34.805	1.00	28.70
ATOM	1747	N	LEU	386	7.208	7.107	35.391	1.00	31.13
ATOM	1748	CA	LEU	386	6.690	7.352	36.734	1.00	31.13
ATOM	1749	CB	LEU	386	6.596	6.044	37.513	1.00	39.10
ATOM	1750	C	LEU	386	7.577	8.348	37.474	1.00	31.13
ATOM	1751	O	LEU	386	7.085	9.201	38.217	1.00	39.10
ATOM	1752	N	HIS	387	8.884	8.254	37.243	1.00	36.46
ATOM	1753	CA	HIS	387	9.837	9.152	37.881	1.00	36.46
ATOM	1754	CB	HIS	387	11.258	8.589	37.794	1.00	62.78
ATOM	1755	CG	HIS	387	11.459	7.338	38.590	1.00	62.78
ATOM	1756	CD2	HIS	387	10.601	6.614	39.346	1.00	62.78
ATOM	1757	ND1	HIS	387	12.675	6.689	38.663	1.00	62.78
ATOM	1758	CE1	HIS	387	12.554	5.620	39.431	1.00	62.78
ATOM	1759	NE2	HIS	387	11.309	5.550	39.856	1.00	62.78
ATOM	1760	C	HIS	387	9.778	10.544	37.266	1.00	36.46
ATOM	1761	O	HIS	387	9.885	11.543	37.979	1.00	62.78
ATOM	1762	N	MET	388	9.587	10.612	35.950	1.00	33.41
ATOM	1763	CA	MET	388	9.505	11.894	35.258	1.00	33.41
ATOM	1764	CB	MET	388	9.269	11.703	33.755	1.00	42.63
ATOM	1765	CG	MET	388	10.456	11.144	32.982	1.00	42.63
ATOM	1766	SD	MET	388	10.253	11.325	31.192	1.00	42.63
ATOM	1767	CE	MET	388	9.501	9.772	30.748	1.00	42.63
ATOM	1768	C	MET	388	8.385	12.746	35.849	1.00	33.41
ATOM	1769	O	MET	388	8.573	13.934	36.103	1.00	42.63
ATOM	1770	N	LYS	389	7.235	12.126	36.092	1.00	39.26
ATOM	1771	CA	LYS	389	6.082	12.825	36.659	1.00	39.26
ATOM	1772	CB	LYS	389	4.867	11.900	36.719	1.00	52.87
ATOM	1773	CG	LYS	389	4.237	11.594	35.379	1.00	52.87
ATOM	1774	CD	LYS	389	3.048	10.667	35.553	1.00	52.87
ATOM	1775	CE	LYS	389	3.482	9.327	36.125	1.00	52.87
ATOM	1776	NZ	LYS	389	2.335	8.407	36.326	1.00	52.87
ATOM	1777	C	LYS	389	6.363	13.360	38.056	1.00	39.26
ATOM	1778	O	LYS	389	5.837	14.404	38.452	1.00	52.87
ATOM	1779	N	VAL	390	7.156	12.614	38.818	1.00	44.18
ATOM	1780	CA	VAL	390	7.508	13.016	40.172	1.00	44.18
ATOM	1781	CB	VAL	390	8.299	11.898	40.905	1.00	50.50
ATOM	1782	CG1	VAL	390	8.718	12.362	42.293	1.00	50.50
ATOM	1783	CG2	VAL	390	7.455	10.640	41.012	1.00	50.50
ATOM	1784	C	VAL	390	8.352	14.288	40.145	1.00	44.18
ATOM	1785	O	VAL	390	8.144	15.198	40.948	1.00	50.50
ATOM	1786	N	GLU	391	9.261	14.368	39.179	1.00	38.64
ATOM	1787	CA	GLU	391	10.161	15.509	39.056	1.00	38.64
ATOM	1788	CB	GLU	391	11.483	15.060	38.424	1.00	64.18

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ATOM   1789  CG  GLU   391      12.065  13.766  39.009  1.00 64.18
ATOM   1790  CD  GLU   391      12.662  13.922  40.405  1.00 64.18
ATOM   1791  OE1 GLU   391      12.190  14.773  41.192  1.00 64.18
ATOM   1792  OE2 GLU   391      13.611  13.173  40.721  1.00 64.18
ATOM   1793  C   GLU   391       9.623  16.737  38.314  1.00 38.64
ATOM   1794  O⁻  GLU   391       9.656  17.850  38.849  1.00 64.18
ATOM   1795  N   CYS   392       9.125  16.539  37.096  1.00 37.24
ATOM   1796  CA  CYS   392       8.611  17.635  36.271  1.00 37.24
ATOM   1797  CB  CYS   392       8.879  17.345  34.784  1.00 30.64
ATOM   1798  SG  CYS   392      10.634  17.137  34.283  1.00 30.64
ATOM   1799  C   CYS   392       7.110  17.882  36.496  1.00 37.24
ATOM   1800  O   CYS   392       6.403  17.011  37.006  1.00 30.64
ATOM   1801  N   PRO   393       6.625  19.107  36.199  1.00 40.56
ATOM   1802  CD  PRO   393       7.444  20.297  35.904  1.00 33.41
ATOM   1803  CA  PRO   393       5.209  19.473  36.358  1.00 40.56
ATOM   1804  CB  PRO   393       5.253  21.001  36.404  1.00 33.41
ATOM   1805  CG  PRO   393       6.409  21.332  35.527  1.00 33.41
ATOM   1806  C   PRO   393       4.330  18.975  35.207  1.00 40.56
ATOM   1807  O   PRO   393       4.776  18.907  34.057  1.00 33.41
ATOM   1808  N   THR   394       3.067  18.691  35.516  1.00 41.91
ATOM   1809  CA  THR   394       2.101  18.186  34.540  1.00 41.91
ATOM   1810  CB  THR   394       0.691  18.075  35.156  1.00 62.04
ATOM   1811  OG1 THR   394       0.706  18.582  36.497  1.00 62.04
ATOM   1812  CG2 THR   394       0.232  16.626  35.168  1.00 62.04
ATOM   1813  C   THR   394       1.995  18.984  33.242  1.00 41.91
ATOM   1814  O   THR   394       1.758  18.411  32.181  1.00 62.04
ATOM   1815  N   GLU   395       2.191  20.297  33.327  1.00 43.92
ATOM   1816  CA  GLU   395       2.104  21.176  32.160  1.00 43.92
ATOM   1817  CB  GLU   395       2.313  22.626  32.585  1.00 34.22
ATOM   1818  C   GLU   395       3.071  20.814  31.031  1.00 43.92
ATOM   1819  O   GLU   395       2.887  21.243  29.891  1.00 34.22
ATOM   1820  N   LEU   396       4.104  20.041  31.350  1.00 34.92
ATOM   1821  CA  LEU   396       5.096  19.634  30.359  1.00 34.92
ATOM   1822  CB  LEU   396       6.473  19.495  31.017  1.00 35.81
ATOM   1823  CG  LEU   396       7.074  20.747  31.662  1.00 35.81
ATOM   1824  CD1 LEU   396       8.427  20.410  32.263  1.00 35.81
ATOM   1825  CD2 LEU   396       7.209  21.857  30.629  1.00 35.81
ATOM   1826  C   LEU   396       4.731  18.324  29.661  1.00 34.92
ATOM   1827  O   LEU   396       5.343  17.954  28.659  1.00 35.81
ATOM   1828  N   PHE   397       3.734  17.627  30.197  1.00 35.28
ATOM   1829  CA  PHE   397       3.302  16.352  29.640  1.00 35.28
ATOM   1830  CB  PHE   397       3.059  15.341  30.764  1.00 27.13
ATOM   1831  CG  PHE   397       4.285  15.004  31.561  1.00 27.13
ATOM   1832  CD1 PHE   397       4.700  15.824  32.604  1.00 27.13
ATOM   1833  CD2 PHE   397       5.021  13.860  31.273  1.00 27.13
ATOM   1834  CE1 PHE   397       5.831  15.510  33.349  1.00 27.13
ATOM   1835  CE2 PHE   397       6.155  13.537  32.013  1.00 27.13
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ATOM  1836  CZ  PHE  397     6.561  14.364  33.052  1.00 27.13
ATOM  1837  C   PHE  397     2.027  16.474  28.812  1.00 35.28
ATOM  1838  O   PHE  397     0.977  16.861  29.331  1.00 27.13
ATOM  1839  N   PRO  398     2.102  16.164  27.505  1.00 26.41
ATOM  1840  CD  PRO  398     3.305  15.850  26.713  1.00 19.32
ATOM  1841  CA  PRO  398     0.917  16.247  26.647  1.00 26.41
ATOM  1842  CB  PRO  398     1.439  15.752  25.300  1.00 19.32
ATOM  1843  CG  PRO  398     2.867  16.193  25.312  1.00 19.32
ATOM  1844  C   PRO  398    -0.157  15.313  27.206  1.00 26.41
ATOM  1845  O   PRO  398     0.160  14.232  27.710  1.00 19.32
ATOM  1846  N   PRO  399    -1.439  15.702  27.104  1.00 25.12
ATOM  1847  CD  PRO  399    -1.935  16.929  26.454  1.00 24.32
ATOM  1848  CA  PRO  399    -2.554  14.894  27.612  1.00 25.12
ATOM  1849  CB  PRO  399    -3.777  15.594  27.022  1.00 24.32
ATOM  1850  CG  PRO  399    -3.349  17.026  26.974  1.00 24.32
ATOM  1851  C   PRO  399    -2.502  13.416  27.222  1.00 25.12
ATOM  1852  O   PRO  399    -2.599  12.540  28.085  1.00 24.32
ATOM  1853  N   LEU  400    -2.322  13.139  25.933  1.00 23.10
ATOM  1854  CA  LEU  400    -2.265  11.759  25.454  1.00 23.10
ATOM  1855  CB  LEU  400    -2.230  11.720  23.923  1.00 22.35
ATOM  1856  CG  LEU  400    -2.485  10.354  23.276  1.00 22.35
ATOM  1857  CD1 LEU  400    -3.792   9.765  23.792  1.00 22.35
ATOM  1858  CD2 LEU  400    -2.523  10.494  21.763  1.00 22.35
ATOM  1859  C   LEU  400    -1.066  11.012  26.032  1.00 23.10
ATOM  1860  O   LEU  400    -1.160   9.825  26.345  1.00 22.35
ATOM  1861  N   PHE  401     0.044  11.723  26.202  1.00 13.85
ATOM  1862  CA  PHE  401     1.269  11.150  26.755  1.00 13.85
ATOM  1863  CB  PHE  401     2.374  12.213  26.753  1.00 26.97
ATOM  1864  CG  PHE  401     3.729  11.702  27.164  1.00 26.97
ATOM  1865  CD1 PHE  401     4.189  10.461  26.732  1.00 26.97
ATOM  1866  CD2 PHE  401     4.561  12.481  27.963  1.00 26.97
ATOM  1867  CE1 PHE  401     5.459  10.005  27.091  1.00 26.97
ATOM  1868  CE2 PHE  401     5.830  12.035  28.327  1.00 26.97
ATOM  1869  CZ  PHE  401     6.280  10.795  27.889  1.00 26.97
ATOM  1870  C   PHE  401     0.993  10.659  28.179  1.00 13.85
ATOM  1871  O   PHE  401     1.393   9.558  28.555  1.00 26.97
ATOM  1872  N   LEU  402     0.274  11.473  28.947  1.00 25.21
ATOM  1873  CA  LEU  402    -0.080  11.145  30.325  1.00 25.21
ATOM  1874  CB  LEU  402    -0.640  12.380  31.035  1.00 29.34
ATOM  1875  CG  LEU  402     0.334  13.411  31.600  1.00 29.34
ATOM  1876  CD1 LEU  402    -0.430  14.658  32.018  1.00 29.34
ATOM  1877  CD2 LEU  402     1.090  12.814  32.775  1.00 29.34
ATOM  1878  C   LEU  402    -1.109  10.025  30.425  1.00 25.21
ATOM  1879  O   LEU  402    -1.034   9.189  31.320  1.00 29.34
ATOM  1880  N   GLU  403    -2.090  10.043  29.529  1.00 23.54
ATOM  1881  CA  GLU  403    -3.159   9.046  29.521  1.00 23.54
ATOM  1882  CB  GLU  403    -4.274   9.482  28.562  1.00 63.22
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ATOM	1883	CG	GLU	403	-5.469	8.531	28.506	1.00	63.22
ATOM	1884	CD	GLU	403	-6.530	8.952	27.498	1.00	63.22
ATOM	1885	OE1	GLU	403	-6.237	9.786	26.613	1.00	63.22
ATOM	1886	OE2	GLU	403	-7.666	8.436	27.589	1.00	63.22
ATOM	1887	C	GLU	403	-2.708	7.629	29.170	1.00	23.54
ATOM	1888	O-	GLU	403	-3.210	6.656	29.735	1.00	63.22
ATOM	1889	N	VAL	404	-1.787	7.515	28.221	1.00	33.24
ATOM	1890	CA	VAL	404	-1.297	6.213	27.782	1.00	33.24
ATOM	1891	CB	VAL	404	-0.621	6.314	26.390	1.00	30.71
ATOM	1892	CG1	VAL	404	-0.097	4.957	25.947	1.00	30.71
ATOM	1893	CG2	VAL	404	-1.611	6.841	25.371	1.00	30.71
ATOM	1894	C	VAL	404	-0.338	5.528	28.752	1.00	33.24
ATOM	1895	O	VAL	404	-0.386	4.305	28.914	1.00	30.71
ATOM	1896	N	PHE	405	0.526	6.309	29.392	1.00	33.66
ATOM	1897	CA	PHE	405	1.516	5.752	30.308	1.00	33.66
ATOM	1898	CB	PHE	405	2.901	6.326	29.984	1.00	34.35
ATOM	1899	CG	PHE	405	3.343	6.076	28.568	1.00	34.35
ATOM	1900	CD1	PHE	405	3.519	7.134	27.683	1.00	34.35
ATOM	1901	CD2	PHE	405	3.569	4.782	28.114	1.00	34.35
ATOM	1902	CE1	PHE	405	3.911	6.906	26.365	1.00	34.35
ATOM	1903	CE2	PHE	405	3.960	4.545	26.798	1.00	34.35
ATOM	1904	CZ	PHE	405	4.131	5.610	25.922	1.00	34.35
ATOM	1905	C	PHE	405	1.189	5.931	31.790	1.00	33.66
ATOM	1906	O	PHE	405	2.036	5.539	32.623	1.00	34.35
ATOM	1907	OXT	PHE	405	0.090	6.434	32.107	1.00	34.35
ATOM	1908	C1	TRI	1	8.375	7.063	18.475	1.00	34.21
ATOM	1909	C2	TRI	1	10.048	8.688	23.016	1.00	33.36
ATOM	1910	C3	TRI	1	8.104	8.391	18.941	1.00	34.21
ATOM	1911	C4	TRI	1	10.496	9.696	23.813	1.00	33.36
ATOM	1912	C5	TRI	1	8.916	8.943	19.927	1.00	34.21
ATOM	1913	C6	TRI	1	10.152	9.772	25.121	1.00	33.36
ATOM	1914	C7	TRI	1	9.862	8.178	20.609	1.00	34.21
ATOM	1915	C8	TRI	1	9.246	8.821	25.653	1.00	33.36
ATOM	1916	C9	TRI	1	10.117	6.865	20.147	1.00	34.21
ATOM	1917	C10	TRI	1	8.805	7.754	24.847	1.00	33.36
ATOM	1918	C11	TRI	1	9.375	6.339	19.026	1.00	34.21
ATOM	1919	C12	TRI	1	9.125	7.756	23.490	1.00	33.36
ATOM	1920	C13	TRI	1	7.540	6.470	17.383	1.00	35.85
ATOM	1921	C15	TRI	1	8.158	6.555	15.938	1.00	35.85
ATOM	1922	I1	TRI	1	8.713	10.990	20.395	1.00	34.21
ATOM	1923	I2	TRI	1	10.951	11.289	26.315	1.00	33.36
ATOM	1924	I3	TRI	1	11.592	5.685	21.118	1.00	34.21
ATOM	1925	O3	TRI	1	9.407	6.654	15.852	1.00	35.85
ATOM	1926	O2	TRI	1	10.570	8.649	21.717	1.00	33.36
ATOM	1927	O1	TRI	1	8.798	8.969	26.979	1.00	33.36
ATOM	1928	O4	TRI	1	7.352	6.522	14.973	1.00	35.85
ATOM	1929	O1	HOH	501	9.189	2.098	11.091	1.00	33.36

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ATOM  1930  O1   HOH  503     5.152   5.261  12.137  1.00 33.36
ATOM  1931  O1   HOH  504     3.970   5.057  16.390  1.00 33.36
ATOM  1932  O1   HOH  534     8.296  -0.941   8.998  1.00 33.36
ATOM  1933  O1   HOH  538     4.845  14.369  13.635  1.00 33.36
ATOM  1934  O1   HOH  540     5.789  12.049  10.352  1.00 33.36
ATOM  1936  O1   HOH  555     5.721   2.525  28.939  1.00 33.36
ATOM  1937  O1   HOH  556     3.732   1.273  26.724  1.00 33.36
ATOM  1935  O1   HOH  600     8.767   4.847   8.517  1.00 33.36
ATOM  1938  AS1  CAD  701     1.863   1.579   0.837  1.00 37.00
ATOM  1939  C2   CAD  701     1.760  -0.100   0.335  1.00 33.36
ATOM  1940  C3   CAD  701     3.511   1.872   1.858  1.00 28.02
ATOM  1941  O4   CAD  701     1.785   2.506  -0.433  1.00 28.02
ATOM  1942  O5   CAD  701     0.592   2.019   1.654  1.00 28.02
ATOM  1943  AS   AS   801    11.254  16.718  33.126  1.00 37.00   AS
ATOM  1944  AS   AS   802    16.338  -1.161  29.914  1.00 37.00   AS
ATOM  1945  AS   AS   803   -14.931 -11.763  25.324  1.00 37.00   AS
END
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APPENDIX 5

TR_IPBR2.PDB

REMARK rTR_ipbr2 full length numbering
REMARK .
REMARK Rfactor 0.214 Rfree 0.224
REMARK Resolution 15. 2.2 all reflections
REMARK
REMARK Three cacodylate-modified cysteines (CYA)
REMARK Cya334, Cya380, Cya392
REMARK cacodylate modeled as single arsenic atom
REMARK
REMARK side chain of certain residues modeled as ALA due to poor
density;
REMARK however, residue name reflects true residue for clarity
REMARK
REMARK clone obtained from Murray et. al.
REMARK deposited sequence confirmed,
REMARK differing from that reported by Thompson et. al.
REMARK in the following codons:
REMARK 281 Thr - Ala
REMARK 285 Lys - Glu
REMARK identical to that reported by Mitsuhashi et. al.
REMARK gb:RNTRAVI X07409
JRNL   AUTH   M.B. MURRAY, N.D.ZILZ, N.L.MCCREARY,M.J.MACDONALD
JRNL   AUTH 2 H.C.TOWLE
JRNL   TITL   ISOLATION AND CHARACTERIZATION OF RAT CDNA CLONES
FOR
TWO
JRNL   TITL 2 DISTINCT THYROID HORMONE RECPTORS
JRNL   REF   JBC   V. 263 25 1988
JRNL   AUTH   C.C.THOMPSON, C.WEINBERGER, R.LEBO, R.M.EVANS
JRNL   TITL   IDENTIFICATION OF A NOVEL THYROID HORMONE RECEPTOR
EXPRESSED
JRNL   TITL 2 IN THE MAMMALIAN CENTRAL NERVOUS SYSTEM
JRNL   REF   SCIENCE   V. 237   1987
JRNL   AUTH   T.MITSUHASHI,G.TENNYSON,V.NIKODEM
JRNL   TITL   NUCLEOTIDE SEQUENCE OF NOVEL CDNAS GENERATED BY
ALTERNATIVE
JRNL   TITL 2 SPLICING OF A RAT THYROID HORMONE RECEPTOR GENE
TRANSCRIPT
JRNL   REF   NUC. ACIDS. RES.   V. 16 12 1988
REMARK
ATOM   1 CB ARG   157   68.481 10.663 6.906 1.00 57.50
ATOM   2 CG ARG   157   69.793 10.213 7.512 1.00 59.93
ATOM   3 CD ARG   157   70.510 11.365 8.189 1.00 70.24

ATOM	4	NE	ARG	157	71.661	10.906	8.961	1.00	77.62
ATOM	5	CZ	ARG	157	71.599	10.492	10.224	1.00	78.75
ATOM	6	NH1	ARG	157	70.440	10.480	10.870	1.00	74.33
ATOM	7	NH2	ARG	157	72.697	10.075	10.839	1.00	83.44
ATOM	8	C	ARG	157	66.314	10.014	5.809	1.00	46.84
ATOM	9	O	ARG	157	66.109	10.397	4.659	1.00	54.49
ATOM	10	N	ARG	157	68.442	9.069	5.013	1.00	56.54
ATOM	11	CA	ARG	157	67.704	9.537	6.222	1.00	52.92
ATOM	12	N	PRO	158	65.335	9.953	6.727	1.00	39.44
ATOM	13	CD	PRO	158	65.503	9.448	8.099	1.00	41.72
ATOM	14	CA	PRO	158	63.946	10.368	6.487	1.00	34.98
ATOM	15	CB	PRO	158	63.282	10.172	7.854	1.00	34.92
ATOM	16	CG	PRO	158	64.096	9.096	8.487	1.00	45.83
ATOM	17	C	PRO	158	63.765	11.804	5.992	1.00	34.13
ATOM	18	O	PRO	158	64.223	12.757	6.621	1.00	31.07
ATOM	19	N	GLU	159	63.110	11.932	4.841	1.00	31.36
ATOM	20	CA	GLU	159	62.814	13.220	4.228	1.00	27.34
ATOM	21	CB	GLU	159	62.569	13.041	2.726	1.00	24.27
ATOM	22	CG	GLU	159	63.814	12.866	1.887	1.00	24.85
ATOM	23	CD	GLU	159	64.409	14.188	1.454	1.00	28.12
ATOM	24	OE1	GLU	159	63.642	15.144	1.224	1.00	29.26
ATOM	25	OE2	GLU	159	65.646	14.269	1.326	1.00	29.52
ATOM	26	C	GLU	159	61.528	13.707	4.870	1.00	24.30
ATOM	27	O	GLU	159	60.855	12.934	5.566	1.00	29.01
ATOM	28	N	PRO	160	61.192	14.989	4.718	1.00	24.62
ATOM	29	CD	PRO	160	61.979	16.126	4.188	1.00	18.72
ATOM	30	CA	PRO	160	59.947	15.451	5.330	1.00	21.62
ATOM	31	CB	PRO	160	59.945	16.955	5.048	1.00	12.71
ATOM	32	CG	PRO	160	61.394	17.297	4.930	1.00	15.12
ATOM	33	C	PRO	160	58.743	14.752	4.671	1.00	24.61
ATOM	34	O	PRO	160	58.789	14.384	3.490	1.00	22.63
ATOM	35	N	THR	161	57.705	14.504	5.450	1.00	25.86
ATOM	36	CA	THR	161	56.515	13.864	4.921	1.00	23.77
ATOM	37	CB	THR	161	55.689	13.201	6.048	1.00	21.75
ATOM	38	OG1	THR	161	55.178	14.210	6.926	1.00	20.78
ATOM	39	CG2	THR	161	56.549	12.227	6.847	1.00	18.44
ATOM	40	C	THR	161	55.680	14.967	4.269	1.00	28.67
ATOM	41	O	THR	161	55.917	16.151	4.510	1.00	29.90
ATOM	42	N	PRO	162	54.685	14.597	3.448	1.00	27.79
ATOM	43	CD	PRO	162	54.313	13.237	3.019	1.00	23.25
ATOM	44	CA	PRO	162	53.843	15.603	2.795	1.00	26.19
ATOM	45	CB	PRO	162	52.699	14.766	2.227	1.00	19.89
ATOM	46	CG	PRO	162	53.394	13.492	1.848	1.00	20.63
ATOM	47	C	PRO	162	53.334	16.661	3.775	1.00	24.81
ATOM	48	O	PRO	162	53.477	17.863	3.526	1.00	21.10
ATOM	49	N	GLU	163	52.812	16.198	4.911	1.00	26.34
ATOM	50	CA	GLU	163	52.266	17.065	5.959	1.00	30.38

ATOM	51	CB	GLU	163	51.640	16.231	7.086	1.00	29.46
ATOM	52	CG	GLU	163	50.482	15.321	6.666	1.00	48.37
ATOM	53	CD	GLU	163	50.918	14.132	5.816	1.00	53.12
ATOM	54	OE1	GLU	163	51.890	13.441	6.194	1.00	52.22
ATOM	55	OE2	GLU	163	50.282	13.886	4.766	1.00	59.14
ATOM	56	C	GLU	163	53.353	17.949	6.552	1.00	26.74
ATOM	57	O	GLU	163	53.109	19.107	6.898	1.00	27.03
ATOM	58	N	GLU	164	54.553	17.389	6.677	1.00	26.74
ATOM	59	CA	GLU	164	55.679	18.124	7.221	1.00	23.65
ATOM	60	CB	GLU	164	56.805	17.174	7.609	1.00	18.85
ATOM	61	CG	GLU	164	56.441	16.306	8.804	1.00	26.81
ATOM	62	CD	GLU	164	57.536	15.334	9.188	1.00	31.06
ATOM	63	OE1	GLU	164	58.404	15.050	8.340	1.00	29.21
ATOM	64	OE2	GLU	164	57.524	14.848	10.340	1.00	31.39
ATOM	65	C	GLU	164	56.165	19.204	6.276	1.00	26.54
ATOM	66	O	GLU	164	56.609	20.258	6.724	1.00	32.48
ATOM	67	N	TRP	165	56.075	18.957	4.971	1.00	23.41
ATOM	68	CA	TRP	165	56.488	19.962	3.998	1.00	20.81
ATOM	69	CB	TRP	165	56.462	19.405	2.573	1.00	18.15
ATOM	70	CG	TRP	165	57.762	18.747	2.164	1.00	15.80
ATOM	71	CD2	TRP	165	59.058	19.377	2.064	1.00	15.35
ATOM	72	CE2	TRP	165	59.959	18.392	1.628	1.00	12.14
ATOM	73	CE3	TRP	165	59.527	20.676	2.287	1.00	17.56
ATOM	74	CD1	TRP	165	57.939	17.449	1.804	1.00	12.78
ATOM	75	NE1	TRP	165	59.253	17.230	1.484	1.00	16.10
ATOM	76	CZ2	TRP	165	61.318	18.657	1.419	1.00	16.26
ATOM	77	CZ3	TRP	165	60.879	20.944	2.079	1.00	19.52
ATOM	78	CH2	TRP	165	61.760	19.933	1.642	1.00	16.48
ATOM	79	C	TRP	165	55.547	21.151	4.109	1.00	19.66
ATOM	80	O	TRP	165	55.975	22.295	3.960	1.00	23.61
ATOM	81	N	ASP	166	54.269	20.882	4.376	1.00	22.66
ATOM	82	CA	ASP	166	53.269	21.943	4.537	1.00	23.35
ATOM	83	CB	ASP	166	51.863	21.359	4.716	1.00	22.61
ATOM	84	CG	ASP	166	51.347	20.681	3.458	1.00	31.41
ATOM	85	OD1	ASP	166	51.816	21.028	2.360	1.00	26.38
ATOM	86	OD2	ASP	166	50.464	19.803	3.570	1.00	32.25
ATOM	87	C	ASP	166	53.631	22.760	5.773	1.00	26.47
ATOM	88	O	ASP	166	53.694	23.991	5.718	1.00	30.25
ATOM	89	N	LEU	167	53.887	22.054	6.872	1.00	24.12
ATOM	90	CA	LEU	167	54.268	22.663	8.139	1.00	26.44
ATOM	91	CB	LEU	167	54.596	21.557	9.148	1.00	32.57
ATOM	92	CG	LEU	167	54.659	21.919	10.629	1.00	36.97
ATOM	93	CD1	LEU	167	53.289	22.402	11.080	1.00	43.83
ATOM	94	CD2	LEU	167	55.096	20.712	11.448	1.00	34.75
ATOM	95	C	LEU	167	55.501	23.533	7.904	1.00	23.19
ATOM	96	O	LEU	167	55.570	24.670	8.368	1.00	28.18
ATOM	97	N	ILE	168	56.450	22.988	7.147	1.00	19.25

ATOM	98	CA	ILE	168	57.703	23.651	6.801	1.00	17.71
ATOM	99	CB	ILE	168	58.632	22.693	6.006	1.00	14.43
ATOM	100	CG2	ILE	168	59.740	23.451	5.304	1.00	16.71
ATOM	101	CG1	ILE	168	59.219	21.644	6.948	1.00	21.24
ATOM	102	CD1	ILE	168	60.063	20.588	6.264	1.00	18.18
ATOM	103	C ·	ILE	168	57.475	24.931	6.002	1.00	28.73
ATOM	104	O	ILE	168	58.064	25.977	6.307	1.00	29.36
ATOM	105	N	HIS	169	56.601	24.866	5.005	1.00	24.43
ATOM	106	CA	HIS	169	56.319	26.027	4.169	1.00	23.64
ATOM	107	CB	HIS	169	55.459	25.631	2.971	1.00	23.55
ATOM	108	CG	HIS	169	56.140	24.683	2.034	1.00	23.82
ATOM	109	CD2	HIS	169	57.455	24.429	1.824	1.00	19.23
ATOM	110	ND1	HIS	169	55.450	23.833	1.199	1.00	22.92
ATOM	111	CE1	HIS	169	56.302	23.089	0.522	1.00	19.56
ATOM	112	NE2	HIS	169	57.527	23.431	0.883	1.00	26.00
ATOM	113	C	HIS	169	55.653	27.135	4.962	1.00	19.37
ATOM	114	O	HIS	169	56.069	28.288	4.880	1.00	25.64
ATOM	115	N	VAL	170	54.638	26.782	5.745	1.00	19.88
ATOM	116	CA	VAL	170	53.925	27.758	6.555	1.00	20.28
ATOM	117	CB	VAL	170	52.755	27.100	7.330	1.00	26.06
ATOM	118	CG1	VAL	170	52.093	28.109	8.259	1.00	20.15
ATOM	119	CG2	VAL	170	51.725	26.541	6.352	1.00	18.69
ATOM	120	C	VAL	170	54.886	28.442	7.532	1.00	23.11
ATOM	121	O	VAL	170	54.907	29.672	7.625	1.00	28.86
ATOM	122	N	ALA	171	55.716	27.644	8.203	1.00	20.48
ATOM	123	CA	ALA	171	56.686	28.146	9.173	1.00	19.84
ATOM	124	CB	ALA	171	57.365	26.985	9.902	1.00	18.07
ATOM	125	C	ALA	171	57.728	29.049	8.512	1.00	20.62
ATOM	126	O	ALA	171	58.033	30.127	9.037	1.00	24.67
ATOM	127	N	THR	172	58.251	28.632	7.359	1.00	20.65
ATOM	128	CA	THR	172	59.247	29.428	6.640	1.00	18.91
ATOM	129	CB	THR	172	59.755	28.709	5.380	1.00	20.06
ATOM	130	OG1	THR	172	60.267	27.417	5.734	1.00	20.30
ATOM	131	CG2	THR	172	60.877	29.516	4.726	1.00	18.38
ATOM	132	C	THR	172	58.675	30.786	6.235	1.00	24.43
ATOM	133	O	THR	172	59.346	31.815	6.360	1.00	23.54
ATOM	134	N	GLU	173	57.430	30.792	5.766	1.00	24.33
ATOM	135	CA	GLU	173	56.783	32.031	5.361	1.00	25.98
ATOM	136	CB	GLU	173	55.460	31.734	4.651	1.00	28.39
ATOM	137	CG	GLU	173	54.679	32.974	4.207	1.00	40.39
ATOM	138	CD	GLU	173	55.487	33.951	3.347	1.00	48.33
ATOM	139	OE1	GLU	173	55.261	35.172	3.478	1.00	51.86
ATOM	140	OE2	GLU	173	56.334	33.513	2.533	1.00	46.92
ATOM	141	C	GLU	173	56.564	32.953	6.562	1.00	25.57
ATOM	142	O	GLU	173	56.877	34.141	6.498	1.00	27.76
ATOM	143	N	ALA	174	56.071	32.383	7.664	1.00	25.31
ATOM	144	CA	ALA	174	55.823	33.128	8.900	1.00	22.66

ATOM	145	CB	ALA	174	55.340	32.183	10.000	1.00	18.21
ATOM	146	C	ALA	174	57.097	33.847	9.338	1.00	23.47
ATOM	147	O	ALA	174	57.056	35.003	9.755	1.00	23.76
ATOM	148	N	HIS	175	58.233	33.168	9.226	1.00	22.22
ATOM	149	CA	HIS	175	59.503	33.769	9.592	1.00	20.21
ATOM	150	CB	HIS	175	60.586	32.700	9.738	1.00	13.82
ATOM	151	CG	HIS	175	61.950	33.261	9.984	1.00	20.53
ATOM	152	CD2	HIS	175	62.378	34.221	10.843	1.00	10.04
ATOM	153	ND1	HIS	175	63.054	32.890	9.249	1.00	22.39
ATOM	154	CE1	HIS	175	64.103	33.596	9.640	1.00	13.46
ATOM	155	NE2	HIS	175	63.715	34.410	10.605	1.00	20.86
ATOM	156	C	HIS	175	59.949	34.822	8.571	1.00	25.39
ATOM	157	O	HIS	175	60.370	35.920	8.949	1.00	26.31
ATOM	158	N	ARG	176	59.868	34.494	7.284	1.00	23.17
ATOM	159	CA	ARG	176	60.292	35.423	6.239	1.00	24.26
ATOM	160	CB	ARG	176	60.168	34.767	4.872	1.00	30.31
ATOM	161	CG	ARG	176	61.286	33.793	4.576	1.00	39.36
ATOM	162	CD	ARG	176	61.049	33.139	3.243	1.00	49.23
ATOM	163	NE	ARG	176	62.188	32.346	2.808	1.00	60.62
ATOM	164	CZ	ARG	176	62.230	31.688	1.653	1.00	67.96
ATOM	165	NH1	ARG	176	61.192	31.731	0.823	1.00	68.84
ATOM	166	NH2	ARG	176	63.313	30.999	1.321	1.00	67.97
ATOM	167	C	ARG	176	59.548	36.749	6.267	1.00	23.09
ATOM	168	O	ARG	176	60.163	37.807	6.173	1.00	30.71
ATOM	169	N	SER	177	58.240	36.686	6.488	1.00	22.69
ATOM	170	CA	SER	177	57.416	37.885	6.536	1.00	26.50
ATOM	171	CB	SER	177	55.946	37.520	6.341	1.00	19.42
ATOM	172	OG	SER	177	55.507	36.611	7.331	1.00	27.68
ATOM	173	C	SER	177	57.574	38.695	7.821	1.00	28.70
ATOM	174	O	SER	177	56.986	39.772	7.948	1.00	34.31
ATOM	175	N	THR	178	58.327	38.165	8.786	1.00	27.42
ATOM	176	CA	THR	178	58.540	38.850	10.060	1.00	21.88
ATOM	177	CB	THR	178	57.842	38.107	11.228	1.00	23.73
ATOM	178	OG1	THR	178	58.354	36.776	11.337	1.00	24.26
ATOM	179	CG2	THR	178	56.344	38.037	10.994	1.00	16.77
ATOM	180	C	THR	178	60.027	39.018	10.375	1.00	23.86
ATOM	181	O	THR	178	60.399	39.439	11.474	1.00	24.64
ATOM	182	N	ASN	179	60.873	38.690	9.402	1.00	23.79
ATOM	183	CA	ASN	179	62.315	38.813	9.563	1.00	26.01
ATOM	184	CB	ASN	179	63.018	37.607	8.947	1.00	23.77
ATOM	185	CG	ASN	179	64.451	37.495	9.386	1.00	30.79
ATOM	186	OD1	ASN	179	64.737	37.376	10.575	1.00	36.19
ATOM	187	ND2	ASN	179	65.364	37.516	8.432	1.00	35.34
ATOM	188	C	ASN	179	62.767	40.101	8.875	1.00	32.11
ATOM	189	O	ASN	179	62.947	40.136	7.652	1.00	36.36
ATOM	190	N	ALA	180	62.945	41.153	9.670	1.00	34.40
ATOM	191	CA	ALA	180	63.333	42.473	9.179	1.00	28.75

ATOM	192	CB	ALA	180	63.653	43.390	10.346	1.00	29.96
ATOM	193	C	ALA	180	64.481	42.481	8.182	1.00	37.02
ATOM	194	O	ALA	180	65.518	41.866	8.414	1.00	41.85
ATOM	195	N	GLN	181	64.266	43.163	7.057	1.00	37.15
ATOM	196	CA	GLN	181	65.261	43.306	5.995	1.00	39.33
ATOM	197	CB	GLN	181	66.572	43.877	6.552	1.00	37.42
ATOM	198	CG	GLN	181	66.420	45.190	7.309	1.00	44.86
ATOM	199	CD	GLN	181	65.779	46.285	6.479	1.00	53.60
ATOM	200	OE1	GLN	181	64.712	46.793	6.821	1.00	58.51
ATOM	201	NE2	GLN	181	66.422	46.650	5.378	1.00	63.36
ATOM	202	C	GLN	181	65.549	42.053	5.164	1.00	44.18
ATOM	203	O	GLN	181	66.367	42.102	4.239	1.00	46.35
ATOM	204	N	GLY	182	64.873	40.949	5.474	1.00	43.76
ATOM	205	CA	GLY	182	65.074	39.713	4.732	1.00	46.26
ATOM	206	C	GLY	182	66.531	39.363	4.477	1.00	49.98
ATOM	207	O	GLY	182	67.309	39.175	5.419	1.00	56.26
ATOM	208	N	SER	183	66.907	39.274	3.205	1.00	50.96
ATOM	209	CA	SER	183	68.281	38.947	2.830	1.00	55.69
ATOM	210	CB	SER	183	68.284	38.024	1.608	1.00	56.52
ATOM	211	OG	SER	183	67.398	38.497	0.609	1.00	60.82
ATOM	212	C	SER	183	69.121	40.197	2.558	1.00	59.84
ATOM	213	O	SER	183	70.352	40.138	2.540	1.00	66.02
ATOM	214	N	HIS	184	68.453	41.338	2.413	1.00	60.68
ATOM	215	CA	HIS	184	69.131	42.600	2.139	1.00	60.01
ATOM	216	CB	HIS	184	68.150	43.596	1.517	1.00	53.49
ATOM	217	C	HIS	184	69.798	43.209	3.380	1.00	59.43
ATOM	218	O	HIS	184	70.373	44.300	3.303	1.00	59.56
ATOM	219	N	TRP	185	69.753	42.500	4.508	1.00	57.54
ATOM	220	CA	TRP	185	70.343	42.995	5.754	1.00	54.25
ATOM	221	CB	TRP	185	70.147	41.988	6.899	1.00	47.54
ATOM	222	CG	TRP	185	70.905	40.692	6.752	1.00	41.08
ATOM	223	CD2	TRP	185	72.233	40.404	7.230	1.00	39.59
ATOM	224	CE2	TRP	185	72.522	39.070	6.874	1.00	30.27
ATOM	225	CE3	TRP	185	73.202	41.146	7.919	1.00	35.23
ATOM	226	CD1	TRP	185	70.462	39.553	6.149	1.00	39.73
ATOM	227	NE1	TRP	185	71.427	38.577	6.219	1.00	40.01
ATOM	228	CZ2	TRP	185	73.740	38.457	7.188	1.00	31.35
ATOM	229	CZ3	TRP	185	74.416	40.535	8.230	1.00	32.76
ATOM	230	CH2	TRP	185	74.673	39.203	7.861	1.00	31.71
ATOM	231	C	TRP	185	71.818	43.382	5.655	1.00	54.21
ATOM	232	O	TRP	185	72.229	44.403	6.200	1.00	52.82
ATOM	233	N	LYS	186	72.605	42.584	4.938	1.00	54.57
ATOM	234	CA	LYS	186	74.034	42.848	4.788	1.00	55.46
ATOM	235	CB	LYS	186	74.712	41.682	4.080	1.00	53.31
ATOM	236	C	LYS	186	74.338	44.160	4.061	1.00	58.96
ATOM	237	O	LYS	186	75.417	44.731	4.226	1.00	62.57
ATOM	238	N	GLN	187	73.382	44.640	3.268	1.00	60.12

ATOM	239	CA	GLN	187	73.563	45.873	2.512	1.00	60.15
ATOM	240	CB	GLN	187	73.157	45.653	1.050	1.00	57.00
ATOM	241	C	GLN	187	72.809	47.064	3.101	1.00	60.91
ATOM	242	O	GLN	187	73.149	48.213	2.822	1.00	66.50
ATOM	243	N	ARG	188	71.795	46.790	3.919	1.00	59.55
ATOM	244	CA	ARG	188	70.983	47.847	4.525	1.00	59.26
ATOM	245	CB	ARG	188	69.504	47.462	4.466	1.00	55.21
ATOM	246	C	ARG	188	71.372	48.243	5.959	1.00	58.97
ATOM	247	O	ARG	188	70.914	49.269	6.469	1.00	58.54
ATOM	248	N	ARG	189	72.202	47.432	6.607	1.00	55.46
ATOM	249	CA	ARG	189	72.630	47.704	7.979	1.00	52.98
ATOM	250	CB	ARG	189	73.211	46.437	8.619	1.00	47.73
ATOM	251	CG	ARG	189	74.509	45.985	7.989	1.00	47.88
ATOM	252	CD	ARG	189	75.080	44.763	8.654	1.00	46.96
ATOM	253	NE	ARG	189	76.377	44.441	8.068	1.00	57.93
ATOM	254	CZ	ARG	189	77.450	44.090	8.768	1.00	64.81
ATOM	255	NH1	ARG	189	77.385	44.005	10.087	1.00	67.27
ATOM	256	NH2	ARG	189	78.600	43.860	8.148	1.00	67.84
ATOM	257	C	ARG	189	73.650	48.838	8.091	1.00	53.48
ATOM	258	O	ARG	189	74.513	49.004	7.227	1.00	57.14
ATOM	259	N	LYS	190	73.533	49.617	9.161	1.00	51.31
ATOM	260	CA	LYS	190	74.444	50.722	9.435	1.00	48.83
ATOM	261	CB	LYS	190	73.682	52.036	9.516	1.00	45.36
ATOM	262	C	LYS	190	75.101	50.411	10.773	1.00	46.88
ATOM	263	O	LYS	190	74.454	49.872	11.675	1.00	48.81
ATOM	264	N	PHE	191	76.385	50.724	10.894	1.00	46.98
ATOM	265	CA	PHE	191	77.123	50.462	12.125	1.00	44.38
ATOM	266	CB	PHE	191	78.630	50.520	11.873	1.00	44.25
ATOM	267	CG	PHE	191	79.170	49.336	11.123	1.00	49.51
ATOM	268	CD1	PHE	191	78.828	49.124	9.791	1.00	52.20
ATOM	269	CD2	PHE	191	80.029	48.437	11.748	1.00	47.25
ATOM	270	CE1	PHE	191	79.335	48.031	9.090	1.00	55.86
ATOM	271	CE2	PHE	191	80.542	47.343	11.059	1.00	49.73
ATOM	272	CZ	PHE	191	80.195	47.139	9.727	1.00	51.55
ATOM	273	C	PHE	191	76.764	51.443	13.233	1.00	46.44
ATOM	274	O	PHE	191	76.647	52.645	12.996	1.00	51.28
ATOM	275	N	LEU	192	76.567	50.924	14.439	1.00	47.66
ATOM	276	CA	LEU	192	76.256	51.776	15.577	1.00	46.44
ATOM	277	CB	LEU	192	75.930	50.924	16.808	1.00	38.06
ATOM	278	CG	LEU	192	75.527	51.672	18.082	1.00	33.55
ATOM	279	CD1	LEU	192	74.180	52.339	17.871	1.00	28.17
ATOM	280	CD2	LEU	192	75.476	50.717	19.268	1.00	26.95
ATOM	281	C	LEU	192	77.524	52.595	15.824	1.00	45.82
ATOM	282	O	LEU	192	78.604	52.024	16.008	1.00	41.65
ATOM	283	N	PRO	193	77.422	53.936	15.782	1.00	48.88
ATOM	284	CD	PRO	193	76.176	54.701	15.577	1.00	47.51
ATOM	285	CA	PRO	193	78.560	54.836	15.999	1.00	47.34

ATOM	286	CB	PRO	193	77.879	56.162	16.319	1.00	46.04
ATOM	287	CG	PRO	193	76.675	56.126	15.438	1.00	46.24
ATOM	288	C	PRO	193	79.475	54.377	17.137	1.00	49.60
ATOM	289	O	PRO	193	79.000	54.033	18.218	1.00	54.05
ATOM	290	N	ASP	194	80.783	54.383	16.891	1.00	50.63
ATOM	291	CA	ASP	194	81.769	53.951	17.885	1.00	54.57
ATOM	292	CB	ASP	194	83.164	53.965	17.272	1.00	59.28
ATOM	293	CG	ASP	194	83.309	52.952	16.170	1.00	66.39
ATOM	294	OD1	ASP	194	83.057	53.311	14.998	1.00	72.95
ATOM	295	OD2	ASP	194	83.640	51.787	16.486	1.00	69.00
ATOM	296	C	ASP	194	81.769	54.726	19.198	1.00	54.41
ATOM	297	O	ASP	194	82.229	54.221	20.222	1.00	55.27
ATOM	298	N	ASP	195	81.268	55.956	19.168	1.00	57.20
ATOM	299	CA	ASP	195	81.206	56.775	20.371	1.00	59.68
ATOM	300	CB	ASP	195	81.017	58.261	20.006	1.00	62.99
ATOM	301	CG	ASP	195	79.747	58.526	19.187	1.00	71.67
ATOM	302	OD1	ASP	195	78.734	58.956	19.796	1.00	70.17
ATOM	303	OD2	ASP	195	79.782	58.311	17.951	1.00	75.23
ATOM	304	C	ASP	195	80.092	56.289	21.306	1.00	58.39
ATOM	305	O	ASP	195	80.032	56.676	22.474	1.00	59.81
ATOM	306	N	ILE	196	79.245	55.399	20.794	1.00	54.47
ATOM	307	CA	ILE	196	78.141	54.840	21.568	1.00	49.00
ATOM	308	CB	ILE	196	76.839	54.780	20.731	1.00	46.64
ATOM	309	CG2	ILE	196	75.701	54.195	21.560	1.00	42.11
ATOM	310	CG1	ILE	196	76.467	56.184	20.241	1.00	44.23
ATOM	311	CD1	ILE	196	75.214	56.238	19.373	1.00	48.45
ATOM	312	C	ILE	196	78.497	53.436	22.068	1.00	46.22
ATOM	313	O	ILE	196	78.912	52.570	21.298	1.00	42.07
ATOM	314	N	GLY	197	78.357	53.228	23.370	1.00	45.62
ATOM	315	CA	GLY	197	78.658	51.930	23.941	1.00	51.49
ATOM	316	C	GLY	197	80.005	51.832	24.625	1.00	54.64
ATOM	317	O	GLY	197	80.377	50.759	25.092	1.00	49.98
ATOM	318	N	GLN	198	80.726	52.946	24.725	1.00	60.08
ATOM	319	CA	GLN	198	82.039	52.939	25.366	1.00	61.01
ATOM	320	CB	GLN	198	83.082	53.568	24.441	1.00	55.55
ATOM	321	C	GLN	198	82.044	53.633	26.733	1.00	59.57
ATOM	322	O	GLN	198	83.103	54.016	27.232	1.00	61.30
ATOM	323	N	SER	199	80.875	53.738	27.362	1.00	57.27
ATOM	324	CA	SER	199	80.758	54.397	28.665	1.00	50.61
ATOM	325	CB	SER	199	80.276	55.842	28.478	1.00	53.70
ATOM	326	OG	SER	199	81.010	56.508	27.463	1.00	61.92
ATOM	327	C	SER	199	79.848	53.684	29.675	1.00	46.41
ATOM	328	O	SER	199	78.798	54.210	30.060	1.00	41.16
ATOM	329	N	PRO	200	80.222	52.466	30.096	1.00	42.08
ATOM	330	CD	PRO	200	81.349	51.648	29.605	1.00	38.31
ATOM	331	CA	PRO	200	79.409	51.722	31.065	1.00	44.04
ATOM	332	CB	PRO	200	79.941	50.297	30.925	1.00	36.06

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ATOM   333  CG  PRO  200      81.377  50.504  30.583  1.00 37.43
ATOM   334  C   PRO  200      79.615  52.270  32.485  1.00 50.91
ATOM   335  O   PRO  200      80.629  51.980  33.123  1.00 55.65
ATOM   336  N   ILE  201      78.663  53.060  32.975  1.00 55.81
ATOM   337  CA  ILE  201      78.781  53.651  34.311  1.00 57.24
ATOM   338  CB  ILE  201      78.861  55.192  34.250  1.00 58.40
ATOM   339  CG2 ILE  201      80.218  55.622  33.709  1.00 60.49
ATOM   340  CG1 ILE  201      77.716  55.751  33.404  1.00 62.42
ATOM   341  CD1 ILE  201      77.819  57.234  33.137  1.00 61.68
ATOM   342  C   ILE  201      77.728  53.241  35.332  1.00 56.52
ATOM   343  O   ILE  201      77.961  53.352  36.537  1.00 60.89
ATOM   344  N   VAL  202      76.564  52.794  34.871  1.00 52.76
ATOM   345  CA  VAL  202      75.522  52.366  35.802  1.00 47.37
ATOM   346  CB  VAL  202      74.117  52.377  35.153  1.00 38.14
ATOM   347  CG1 VAL  202      73.092  51.804  36.117  1.00 30.35
ATOM   348  CG2 VAL  202      73.730  53.798  34.763  1.00 26.69
ATOM   349  C   VAL  202      75.885  50.958  36.285  1.00 53.65
ATOM   350  O   VAL  202      75.914  50.010  35.500  1.00 55.10
ATOM   351  N   SER  203      76.226  50.839  37.561  1.00 59.85
ATOM   352  CA  SER  203      76.614  49.556  38.132  1.00 64.58
ATOM   353  CB  SER  203      77.209  49.749  39.532  1.00 68.95
ATOM   354  OG  SER  203      78.396  50.523  39.483  1.00 74.02
ATOM   355  C   SER  203      75.493  48.528  38.197  1.00 61.69
ATOM   356  O   SER  203      74.351  48.846  38.535  1.00 63.63
ATOM   357  N   MET  204      75.848  47.295  37.859  1.00 57.37
ATOM   358  CA  MET  204      74.932  46.162  37.885  1.00 57.54
ATOM   359  CB  MET  204      74.847  45.505  36.501  1.00 56.59
ATOM   360  CG  MET  204      74.012  46.270  35.489  1.00 44.08
ATOM   361  SD  MET  204      72.255  46.228  35.884  1.00 46.62
ATOM   362  CE  MET  204      71.775  44.758  35.013  1.00 48.37
ATOM   363  C   MET  204      75.522  45.178  38.888  1.00 55.86
ATOM   364  O   MET  204      76.746  45.089  39.027  1.00 58.94
ATOM   365  N   PRO  205      74.671  44.432  39.607  1.00 55.36
ATOM   366  CD  PRO  205      73.203  44.570  39.625  1.00 57.73
ATOM   367  CA  PRO  205      75.119  43.453  40.604  1.00 56.82
ATOM   368  CB  PRO  205      73.814  43.042  41.295  1.00 59.79
ATOM   369  CG  PRO  205      72.769  43.281  40.255  1.00 57.85
ATOM   370  C   PRO  205      75.902  42.239  40.083  1.00 57.25
ATOM   371  O   PRO  205      75.683  41.118  40.541  1.00 66.28
ATOM   372  N   ASP  206      76.822  42.462  39.147  1.00 58.75
ATOM   373  CA  ASP  206      77.639  41.389  38.586  1.00 61.09
ATOM   374  CB  ASP  206      76.802  40.462  37.685  1.00 66.07
ATOM   375  CG  ASP  206      76.158  41.190  36.521  1.00 70.97
ATOM   376  OD1 ASP  206      74.989  41.613  36.662  1.00 76.97
ATOM   377  OD2 ASP  206      76.813  41.322  35.465  1.00 61.12
ATOM   378  C   ASP  206      78.865  41.910  37.832  1.00 61.96
ATOM   379  O   ASP  206      79.406  41.230  36.957  1.00 65.14
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ATOM   380  N   GLY  207     79.282  43.130  38.158  1.00 63.00
ATOM   381  CA  GLY  207     80.455  43.709  37.522  1.00 64.43
ATOM   382  C   GLY  207     80.224  44.467  36.229  1.00 64.81
ATOM   383  O   GLY  207     80.649  45.619  36.110  1.00 68.76
ATOM   384  N   ASP  208     79.584  43.827  35.253  1.00 63.53
ATOM   385  CA  ASP  208   · 79.316  44.459  33.962  1.00 58.96
ATOM   386  CB  ASP  208     78.746  43.434  32.974  1.00 62.84
ATOM   387  CG  ASP  208     79.743  42.336  32.633  1.00 64.73
ATOM   388  OD1 ASP  208     79.575  41.200  33.121  1.00 66.65
ATOM   389  OD2 ASP  208     80.701  42.610  31.878  1.00 68.91
ATOM   390  C   ASP  208     78.368  45.646  34.110  1.00 56.65
ATOM   391  O   ASP  208     77.182  45.473  34.392  1.00 55.79
ATOM   392  N   LYS  209     78.911  46.852  33.953  1.00 54.66
ATOM   393  CA  LYS  209     78.132  48.081  34.082  1.00 53.92
ATOM   394  CB  LYS  209     79.034  49.236  34.515  1.00 49.71
ATOM   395  C   LYS  209     77.395  48.420  32.785  1.00 48.30
ATOM   396  O   LYS  209     77.767  47.945  31.711  1.00 45.62
ATOM   397  N   VAL  210     76.367  49.258  32.894  1.00 43.87
ATOM   398  CA  VAL  210     75.539  49.662  31.757  1.00 41.25
ATOM   399  CB  VAL  210     74.020  49.624  32.125  1.00 32.99
ATOM   400  CG1 VAL  210     73.153  50.029  30.937  1.00 31.44
ATOM   401  CG2 VAL  210     73.626  48.239  32.604  1.00 27.57
ATOM   402  C   VAL  210     75.868  51.061  31.234  1.00 43.30
ATOM   403  O   VAL  210     76.261  51.951  31.994  1.00 44.65
ATOM   404  N   ASP  211     75.688  51.235  29.931  1.00 43.23
ATOM   405  CA  ASP  211     75.906  52.498  29.240  1.00 40.62
ATOM   406  CB  ASP  211     76.686  52.232  27.943  1.00 43.49
ATOM   407  CG  ASP  211     77.014  53.499  27.161  1.00 40.77
ATOM   408  OD1 ASP  211     76.180  54.427  27.092  1.00 42.13
ATOM   409  OD2 ASP  211     78.111  53.549  26.574  1.00 37.49
ATOM   410  C   ASP  211     74.491  53.001  28.921  1.00 44.56
ATOM   411  O   ASP  211     73.849  52.500  27.998  1.00 46.44
ATOM   412  N   LEU  212     74.006  53.982  29.684  1.00 43.76
ATOM   413  CA  LEU  212     72.662  54.538  29.494  1.00 41.47
ATOM   414  CB  LEU  212     72.473  55.785  30.359  1.00 40.45
ATOM   415  CG  LEU  212     72.360  55.585  31.867  1.00 44.47
ATOM   416  CD1 LEU  212     72.127  56.923  32.551  1.00 40.49
ATOM   417  CD2 LEU  212     71.217  54.634  32.153  1.00 45.94
ATOM   418  C   LEU  212     72.325  54.886  28.049  1.00 40.77
ATOM   419  O   LEU  212     71.254  54.540  27.548  1.00 42.25
ATOM   420  N   GLU  213     73.241  55.588  27.394  1.00 42.53
ATOM   421  CA  GLU  213     73.068  56.008  26.009  1.00 43.60
ATOM   422  CB  GLU  213     74.267  56.860  25.598  1.00 43.84
ATOM   423  CG  GLU  213     74.246  57.334  24.167  1.00 51.70
ATOM   424  CD  GLU  213     75.598  57.848  23.722  1.00 59.23
ATOM   425  OE1 GLU  213     75.655  58.939  23.121  1.00 60.14
ATOM   426  OE2 GLU  213     76.611  57.158  23.980  1.00 64.78
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ATOM   427  C   GLU   213    72.913 54.810 25.066  1.00 42.63
ATOM   428  O   GLU   213    72.008 54.779 24.226  1.00 37.04
ATOM   429  N   ALA   214    73.775 53.814 25.245  1.00 39.28
ATOM   430  CA  ALA   214    73.753 52.605 24.424  1.00 39.52
ATOM   431  CB  ALA   214    74.952 51.726 24.740  1.00 35.16
ATOM   432  C_  ALA   214    72.460 51.852 24.694  1.00 37.14
ATOM   433  O   ALA   214    71.795 51.390 23.767  1.00 42.29
ATOM   434  N   PHE   215    72.098 51.773 25.970  1.00 31.60
ATOM   435  CA  PHE   215    70.883 51.102 26.404  1.00 31.67
ATOM   436  CB  PHE   215    70.728 51.217 27.922  1.00 24.80
ATOM   437  CG  PHE   215    69.512 50.522 28.458  1.00 21.78
ATOM   438  CD1 PHE   215    69.553 49.171 28.771  1.00 24.64
ATOM   439  CD2 PHE   215    68.328 51.223 28.658  1.00 21.53
ATOM   440  CE1 PHE   215    68.429 48.528 29.277  1.00 27.63
ATOM   441  CE2 PHE   215    67.200 50.591 29.163  1.00 21.60
ATOM   442  CZ  PHE   215    67.249 49.242 29.472  1.00 21.35
ATOM   443  C   PHE   215    69.675 51.706 25.694  1.00 35.75
ATOM   444  O   PHE   215    68.838 50.975 25.161  1.00 34.84
ATOM   445  N   SER   216    69.604 53.035 25.665  1.00 39.09
ATOM   446  CA  SER   216    68.506 53.739 25.001  1.00 40.61
ATOM   447  CB  SER   216    68.668 55.249 25.165  1.00 43.86
ATOM   448  OG  SER   216    68.616 55.603 26.537  1.00 68.66
ATOM   449  C   SER   216    68.444 53.380 23.518  1.00 40.76
ATOM   450  O   SER   216    67.362 53.161 22.969  1.00 35.50
ATOM   451  N   GLU   217    69.611 53.332 22.878  1.00 38.37
ATOM   452  CA  GLU   217    69.709 52.989 21.462  1.00 37.80
ATOM   453  CB  GLU   217    71.164 53.049 20.997  1.00 39.67
ATOM   454  CG  GLU   217    71.701 54.461 20.880  1.00 46.65
ATOM   455  CD  GLU   217    70.881 55.315 19.925  1.00 53.25
ATOM   456  OE1 GLU   217    70.920 55.056 18.702  1.00 57.12
ATOM   457  OE2 GLU   217    70.189 56.240 20.400  1.00 54.13
ATOM   458  C   GLU   217    69.135 51.598 21.209  1.00 38.48
ATOM   459  O   GLU   217    68.416 51.378 20.228  1.00 43.00
ATOM   460  N   PHE   218    69.426 50.677 22.120  1.00 35.49
ATOM   461  CA  PHE   218    68.934 49.313 22.018  1.00 31.76
ATOM   462  CB  PHE   218    69.743 48.392 22.925  1.00 29.10
ATOM   463  CG  PHE   218    71.169 48.260 22.510  1.00 26.25
ATOM   464  CD1 PHE   218    72.176 48.177 23.459  1.00 24.59
ATOM   465  CD2 PHE   218    71.510 48.233 21.163  1.00 23.53
ATOM   466  CE1 PHE   218    73.504 48.072 23.073  1.00 27.68
ATOM   467  CE2 PHE   218    72.832 48.128 20.765  1.00 25.37
ATOM   468  CZ  PHE   218    73.834 48.047 21.721  1.00 28.43
ATOM   469  C   PHE   218    67.445 49.202 22.321  1.00 31.30
ATOM   470  O   PHE   218    66.726 48.496 21.621  1.00 35.18
ATOM   471  N   THR   219    66.967 49.915 23.333  1.00 30.54
ATOM   472  CA  THR   219    65.552 49.853 23.675  1.00 33.53
ATOM   473  CB  THR   219    65.269 50.467 25.057  1.00 36.07
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ATOM   474  OG1 THR   219      65.903 51.746 25.157  1.00 42.99
ATOM   475  CG2 THR   219      65.797 49.562 26.145  1.00 34.32
ATOM   476  C   THR   219      64.680 50.514 22.609  1.00 34.53
ATOM   477  O   THR   219      63.507 50.162 22.450  1.00 36.57
ATOM   478  N   LYS   220      65.267 51.457 21.873  1.00 38.13
ATOM   479  CA  LYS   220      64.563 52.158 20.806  1.00 41.42
ATOM   480  CB  LYS   220      65.452 53.257 20.208  1.00 41.62
ATOM   481  C   LYS   220      64.140 51.182 19.716  1.00 41.80
ATOM   482  O   LYS   220      63.032 51.274 19.192  1.00 43.29
ATOM   483  N   ILE   221      65.018 50.234 19.393  1.00 36.93
ATOM   484  CA  ILE   221      64.726 49.250 18.355  1.00 37.33
ATOM   485  CB  ILE   221      65.965 48.932 17.482  1.00 33.71
ATOM   486  CG2 ILE   221      66.491 50.202 16.826  1.00 41.26
ATOM   487  CG1 ILE   221      67.042 48.235 18.309  1.00 30.36
ATOM   488  CD1 ILE   221      68.178 47.687 17.472  1.00 26.28
ATOM   489  C   ILE   221      64.141 47.922 18.845  1.00 40.49
ATOM   490  O   ILE   221      63.593 47.159 18.048  1.00 43.43
ATOM   491  N   ILE   222      64.219 47.651 20.144  1.00 39.43
ATOM   492  CA  ILE   222      63.703 46.394 20.667  1.00 35.49
ATOM   493  CB  ILE   222      64.169 46.133 22.130  1.00 34.06
ATOM   494  CG2 ILE   222      63.287 46.881 23.130  1.00 26.15
ATOM   495  CG1 ILE   222      64.155 44.627 22.405  1.00 34.08
ATOM   496  CD1 ILE   222      64.760 44.220 23.719  1.00 33.67
ATOM   497  C   ILE   222      62.186 46.230 20.539  1.00 37.60
ATOM   498  O   ILE   222      61.703 45.127 20.279  1.00 42.14
ATOM   499  N   THR   223      61.438 47.324 20.665  1.00 34.60
ATOM   500  CA  THR   223      59.979 47.257 20.562  1.00 35.96
ATOM   501  CB  THR   223      59.323 48.645 20.799  1.00 41.70
ATOM   502  OG1 THR   223      59.681 49.119 22.106  1.00 44.59
ATOM   503  CG2 THR   223      57.796 48.548 20.706  1.00 42.58
ATOM   504  C   THR   223      59.478 46.614 19.252  1.00 34.77
ATOM   505  O   THR   223      58.671 45.680 19.289  1.00 30.60
ATOM   506  N   PRO   224      59.942 47.103 18.084  1.00 31.99
ATOM   507  CD  PRO   224      60.784 48.288 17.839  1.00 30.37
ATOM   508  CA  PRO   224      59.496 46.517 16.815  1.00 29.25
ATOM   509  CB  PRO   224      60.225 47.366 15.769  1.00 29.27
ATOM   510  CG  PRO   224      60.393 48.677 16.441  1.00 36.31
ATOM   511  C   PRO   224      59.913 45.050 16.723  1.00 29.20
ATOM   512  O   PRO   224      59.146 44.209 16.251  1.00 33.73
ATOM   513  N   ALA   225      61.124 44.754 17.192  1.00 19.86
ATOM   514  CA  ALA   225      61.663 43.395 17.175  1.00 19.61
ATOM   515  CB  ALA   225      63.086 43.388 17.730  1.00 19.08
ATOM   516  C   ALA   225      60.777 42.428 17.960  1.00 20.48
ATOM   517  O   ALA   225      60.474 41.331 17.489  1.00 24.33
ATOM   518  N   ILE   226      60.330 42.847 19.141  1.00 23.72
ATOM   519  CA  ILE   226      59.471 42.001 19.972  1.00 21.94
ATOM   520  CB  ILE   226      59.152 42.667 21.333  1.00 21.01
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ATOM	521	CG2	ILE	226	58.118	41.846	22.095	1.00	15.14
ATOM	522	CG1	ILE	226	60.425	42.841	22.163	1.00	20.45
ATOM	523	CD1	ILE	226	60.216	43.741	23.358	1.00	17.65
ATOM	524	C	ILE	226	58.165	41.758	19.228	1.00	24.04
ATOM	525	O	ILE	226	57.640	40.642	19.220	1.00	26.92
ATOM	526	N·	THR	227	57.653	42.811	18.596	1.00	25.22
ATOM	527	CA	THR	227	56.410	42.730	17.836	1.00	27.92
ATOM	528	CB	THR	227	55.984	44.132	17.333	1.00	34.33
ATOM	529	OG1	THR	227	55.823	45.007	18.458	1.00	33.62
ATOM	530	CG2	THR	227	54.669	44.061	16.563	1.00	39.18
ATOM	531	C	THR	227	56.524	41.733	16.671	1.00	23.61
ATOM	532	O	THR	227	55.587	40.977	16.413	1.00	24.41
ATOM	533	N	ARG	228	57.670	41.704	15.995	1.00	15.49
ATOM	534	CA	ARG	228	57.872	40.773	14.885	1.00	17.92
ATOM	535	CB	ARG	228	59.174	41.075	14.137	1.00	19.84
ATOM	536	CG	ARG	228	59.203	42.437	13.452	1.00	20.62
ATOM	537	CD	ARG	228 ·	60.351	42.523	12.453	1.00	24.29
ATOM	538	NE	ARG	228	61.641	42.168	13.047	1.00	27.04
ATOM	539	CZ	ARG	228	62.452	43.039	13.642	1.00	37.92
ATOM	540	NH1	ARG	228	62.113	44.327	13.725	1.00	42.82
ATOM	541	NH2	ARG	228	63.618	42.634	14.136	1.00	34.80
ATOM	542	C	ARG	228	57.870	39.323	15.387	1.00	22.51
ATOM	543	O	ARG	228	57.402	38.421	14.686	1.00	28.49
ATOM	544	N	VAL	229	58.362	39.104	16.607	1.00	21.46
ATOM	545	CA	VAL	229	58.372	37.762	17.187	1.00	20.12
ATOM	546	CB	VAL	229	59.149	37.707	18.524	1.00	17.21
ATOM	547	CG1	VAL	229	59.023	36.322	19.152	1.00	13.73
ATOM	548	CG2	VAL	229	60.611	38.019	18.287	1.00	15.80
ATOM	549	C	VAL	229	56.926	37.348	17.421	1.00	19.19
ATOM	550	O	VAL	229	56.528	36.224	17.089	1.00	19.86
ATOM	551	N	VAL·	230	56.134	38.275	17.953	1.00	21.49
ATOM	552	CA	VAL	230	54.721	38.023	18.217	1.00	17.69
ATOM	553	CB	VAL	230	54.041	39.239	18.881	1.00	21.30
ATOM	554	CG1	VAL	230	52.568	38.952	19.090	1.00	17.26
ATOM	555	CG2	VAL	230	54.706	39.572	20.218	1.00	17.13
ATOM	556	C	VAL	230	54.003	37.707	16.902	1.00	26.39
ATOM	557	O	VAL	230	53.180	36.790	16.843	1.00	29.63
ATOM	558	N	ASP	231	54.333	38.451	15.848	1.00	25.52
ATOM	559	CA	ASP	231	53.724	38.242	14.537	1.00	26.78
ATOM	560	CB	ASP	231	54.132	39.353	13.571	1.00	23.70
ATOM	561	CG	ASP	231	53.649	40.728	14.012	1.00	31.60
ATOM	562	OD1	ASP	231	52.656	40.820	14.771	1.00	31.79
ATOM	563	OD2	ASP	231	54.271	41.727	13.593	1.00	35.74
ATOM	564	C	ASP	231	54.108	36.879	13.970	1.00	27.69
ATOM	565	O	ASP	231	53.279	36.196	13.366	1.00	25.15
ATOM	566	N	PHE	232	55.364	36.490	14.170	1.00	22.29
ATOM	567	CA	PHE	232	55.858	35.200	13.703	1.00	23.78

ATOM	568	CB	PHE	232	57.328	35.008	14.097	1.00	24.76
ATOM	569	CG	PHE	232	57.794	33.581	14.017	1.00	25.63
ATOM	570	CD1	PHE	232	58.000	32.967	12.785	1.00	24.50
ATOM	571	CD2	PHE	232	57.980	32.830	15.181	1.00	19.35
ATOM	572	CE1	PHE	232	58.381	31.630	12.705	1.00	22.27
ATOM	573	CE2	PHE	232	58.359	31.496	15.114	1.00	20.63
ATOM	574	CZ	PHE	232	58.561	30.893	13.873	1.00	26.10
ATOM	575	C	PHE	232	55.018	34.093	14.328	1.00	23.51
ATOM	576	O	PHE	232	54.541	33.189	13.637	1.00	22.39
ATOM	577	N	ALA	233	54.837	34.182	15.644	1.00	24.55
ATOM	578	CA	ALA	233	54.070	33.192	16.387	1.00	23.10
ATOM	579	CB	ALA	233	54.145	33.490	17.869	1.00	17.99
ATOM	580	C	ALA	233	52.616	33.137	15.929	1.00	27.99
ATOM	581	O	ALA	233	52.063	32.051	15.744	1.00	25.71
ATOM	582	N	LYS	234	51.997	34.305	15.760	1.00	30.19
ATOM	583	CA	LYS	234	50.601	34.380	15.325	1.00	31.58
ATOM	584	CB	LYS	234	50.136	35.838	15.229	1.00	30.40
ATOM	585	CG	LYS	234	50.100	36.593	16.555	1.00	37.97
ATOM	586	CD	LYS	234	49.151	35.947	17.569	1.00	53.64
ATOM	587	CE	LYS	234	47.694	35.958	17.101	1.00	59.60
ATOM	588	NZ	LYS	234	46.773	35.268	18.060	1.00	54.22
ATOM	589	C	LYS	234	50.388	33.686	13.978	1.00	30.35
ATOM	590	O	LYS	234	49.318	33.142	13.716	1.00	32.50
ATOM	591	N	LYS	235	51.425	33.687	13.144	1.00	23.98
ATOM	592	CA	LYS	235	51.351	33.071	11.828	1.00	22.75
ATOM	593	CB	LYS	235	52.353	33.737	10.896	1.00	23.12
ATOM	594	CG	LYS	235	51.997	35.181	10.631	1.00	20.88
ATOM	595	CD	LYS	235	52.982	35.836	9.688	1.00	26.50
ATOM	596	CE	LYS	235	52.512	37.227	9.310	1.00	31.33
ATOM	597	NZ	LYS	235	53.439	37.862	8.341	1.00	36.51
ATOM	598	C	LYS	235	51.508	31.554	11.791	1.00	28.37
ATOM	599	O	LYS	235	51.491	30.948	10.721	1.00	29.62
ATOM	600	N	LEU	236	51.700	30.943	12.954	1.00	33.22
ATOM	601	CA	LEU	236	51.828	29.494	13.036	1.00	32.24
ATOM	602	CB	LEU	236	52.911	29.101	14.043	1.00	26.25
ATOM	603	CG	LEU	236	54.327	29.582	13.730	1.00	23.40
ATOM	604	CD1	LEU	236	55.289	29.113	14.806	1.00	20.52
ATOM	605	CD2	LEU	236	54.750	29.054	12.374	1.00	20.29
ATOM	606	C	LEU	236	50.470	28.984	13.502	1.00	37.08
ATOM	607	O	LEU	236	50.013	29.342	14.588	1.00	34.23
ATOM	608	N	PRO	237	49.811	28.134	12.695	1.00	44.89
ATOM	609	CD	PRO	237	50.351	27.597	11.432	1.00	42.95
ATOM	610	CA	PRO	237	48.491	27.556	12.990	1.00	48.88
ATOM	611	CB	PRO	237	48.396	26.406	11.987	1.00	51.40
ATOM	612	CG	PRO	237	49.142	26.931	10.813	1.00	53.54
ATOM	613	C	PRO	237	48.278	27.072	14.430	1.00	49.12
ATOM	614	O	PRO	237	47.387	27.551	15.133	1.00	48.18

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ATOM    615  N   MET  238      49.104  26.126  14.860  1.00 45.79
ATOM    616  CA  MET  238      49.029  25.558  16.200  1.00 52.79
ATOM    617  CB  MET  238      50.133  24.505  16.378  1.00 49.72
ATOM    618  CG  MET  238      49.861  23.195  15.637  1.00 58.16
ATOM    619  SD  MET  238      51.342  22.205  15.284  1.00 60.11
ATOM    620  CE  MET  238      50.993  21.626  13.625  1.00 53.03
ATOM    621  C   MET  238      49.103  26.593  17.324  1.00 53.36
ATOM    622  O   MET  238      48.583  26.365  18.420  1.00 58.87
ATOM    623  N   PHE  239      49.713  27.742  17.043  1.00 48.09
ATOM    624  CA  PHE  239      49.861  28.793  18.045  1.00 41.38
ATOM    625  CB  PHE  239      51.011  29.736  17.677  1.00 32.92
ATOM    626  CG  PHE  239      51.307  30.763  18.734  1.00 31.32
ATOM    627  CD1 PHE  239      52.162  30.462  19.790  1.00 28.28
ATOM    628  CD2 PHE  239      50.715  32.024  18.689  1.00 24.80
ATOM    629  CE1 PHE  239      52.425  31.402  20.790  1.00 29.45
ATOM    630  CE2 PHE  239      50.970  32.973  19.682  1.00 32.29
ATOM    631  CZ  PHE  239      51.828  32.659  20.737  1.00 26.00
ATOM    632  C   PHE  239      48.590  29.592  18.344  1.00 37.40
ATOM    633  O   PHE  239      48.194  29.696  19.501  1.00 33.32
ATOM    634  N   SER  240      47.958  30.166  17.321  1.00 36.32
ATOM    635  CA  SER  240      46.745  30.959  17.529  1.00 39.00
ATOM    636  CB  SER  240      46.385  31.724  16.258  1.00 47.52
ATOM    637  OG  SER  240      47.390  32.671  15.947  1.00 52.67
ATOM    638  C   SER  240      45.539  30.158  18.032  1.00 36.82
ATOM    639  O   SER  240      44.548  30.743  18.485  1.00 43.02
ATOM    640  N   GLU  241      45.617  28.833  17.931  1.00 38.98
ATOM    641  CA  GLU  241      44.554  27.954  18.408  1.00 40.35
ATOM    642  CB  GLU  241      44.788  26.521  17.926  1.00 49.38
ATOM    643  CG  GLU  241      44.541  26.287  16.452  1.00 65.25
ATOM    644  CD  GLU  241      44.873  24.856  16.002  1.00 70.72
ATOM    645  OE1 GLU  241      44.806  23.923  16.845  1.00 73.36
ATOM    646  OE2 GLU  241      45.211  24.679  14.805  1.00 68.60
ATOM    647  C   GLU  241      44.550  27.968  19.934  1.00 37.83
ATOM    648  O   GLU  241      43.504  27.857  20.570  1.00 40.77
ATOM    649  N   LEU  242      45.747  28.103  20.498  1.00 34.71
ATOM    650  CA  LEU  242      45.974  28.132  21.944  1.00 31.77
ATOM    651  CB  LEU  242      47.478  28.240  22.215  1.00 24.87
ATOM    652  CG  LEU  242      48.345  27.006  22.455  1.00 30.51
ATOM    653  CD1 LEU  242      47.814  25.763  21.772  1.00 31.72
ATOM    654  CD2 LEU  242      49.743  27.328  21.996  1.00 24.25
ATOM    655  C   LEU  242      45.274  29.287  22.657  1.00 29.41
ATOM    656  O   LEU  242      45.029  30.339  22.071  1.00 28.12
ATOM    657  N   PRO  243      44.913  29.089  23.938  1.00 32.37
ATOM    658  CD  PRO  243      44.976  27.849  24.728  1.00 27.94
ATOM    659  CA  PRO  243      44.253  30.165  24.685  1.00 33.92
ATOM    660  CB  PRO  243      44.041  29.537  26.065  1.00 29.41
ATOM    661  CG  PRO  243      43.929  28.072  25.775  1.00 30.77
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ATOM    662  C   PRO   243      45.246  31.334  24.775  1.00 35.86
ATOM    663  O   PRO   243      46.461  31.110  24.809  1.00 38.79
ATOM    664  N   CYS   244      44.751  32.570  24.834  1.00 39.67
ATOM    665  CA  CYS   244      45.621  33.749  24.931  1.00 45.78
ATOM    666  CB  CYS   244      44.788  35.028  25.102  1.00 71.13
ATOM    667  SG  CYS   244      44.068  35.680  23.580  1.00100.76
ATOM    669  C   CYS   244      46.660  33.665  26.051  1.00 40.08
ATOM    670  O   CYS   244      47.797  34.096  25.879  1.00 35.68
ATOM    671  N   GLU   245      46.265  33.088  27.184  1.00 34.25
ATOM    672  CA  GLU   245      47.156  32.939  28.337  1.00 34.60
ATOM    673  CB  GLU   245      46.426  32.296  29.524  1.00 42.20
ATOM    674  CG  GLU   245      45.356  33.171  30.160  1.00 41.92
ATOM    675  CD  GLU   245      43.947  32.808  29.730  1.00 39.68
ATOM    676  OE1 GLU   245      43.080  32.693  30.618  1.00 38.31
ATOM    677  OE2 GLU   245      43.697  32.644  28.516  1.00 48.13
ATOM    678  C   GLU   245      48.376  32.109  27.984  1.00 29.54
ATOM    679  O   GLU   245      49.497  32.437  28.381  1.00 33.54
ATOM    680  N   ASP   246      48.146  31.034  27.236  1.00 26.40
ATOM    681  CA  ASP   246      49.219  30.154  26.794  1.00 26.99
ATOM    682  CB  ASP   246      48.650  28.887  26.153  1.00 29.86
ATOM    683  CG  ASP   246      48.184  27.876  27.175  1.00 34.10
ATOM    684  OD1 ASP   246      48.149  28.199  28.381  1.00 31.83
ATOM    685  OD2 ASP   246      47.863  26.742  26.772  1.00 35.79
ATOM    686  C   ASP   246      50.103  30.875  25.790  1.00 28.07
ATOM    687  O   ASP   246      51.331  30.789  25.863  1.00 27.35
ATOM    688  N   GLN   247      49.472  31.577  24.851  1.00 25.53
ATOM    689  CA  GLN   247      50.198  32.327  23.829  1.00 26.08
ATOM    690  CB  GLN   247      49.228  33.089  22.924  1.00 23.38
ATOM    691  CG  GLN   247      48.303  32.213  22.091  1.00 23.76
ATOM    692  CD  GLN   247      47.429  33.029  21.151  1.00 26.89
ATOM    693  OE1 GLN   247      47.853  34.054  20.628  1.00 33.51
ATOM    694  NE2 GLN   247      46.198  32.593  20.957  1.00 27.44
ATOM    695  C   GLN   247      51.133  33.313  24.511  1.00 22.74
ATOM    696  O   GLN   247      52.326  33.373  24.205  1.00 27.63
ATOM    697  N   ILE   248      50.588  34.047  25.473  1.00 25.03
ATOM    698  CA  ILE   248      51.353  35.035  26.220  1.00 25.94
ATOM    699  CB  ILE   248      50.436  35.781  27.226  1.00 24.84
ATOM    700  CG2 ILE   248      51.251  36.633  28.179  1.00 21.87
ATOM    701  CG1 ILE   248      49.430  36.652  26.459  1.00 27.98
ATOM    702  CD1 ILE   248      48.359  37.298  27.328  1.00 29.90
ATOM    703  C   ILE   248      52.535  34.382  26.939  1.00 27.53
ATOM    704  O   ILE   248      53.671  34.847  26.833  1.00 29.35
ATOM    705  N   ILE   249      52.279  33.274  27.622  1.00 24.38
ATOM    706  CA  ILE   249      53.334  32.582  28.354  1.00 26.26
ATOM    707  CB  ILE   249      52.759  31.395  29.166  1.00 29.81
ATOM    708  CG2 ILE   249      53.874  30.521  29.726  1.00 29.16
ATOM    709  CG1 ILE   249      51.883  31.923  30.300  1.00 27.15
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ATOM	710	CD1	ILE	249	51.173	30.838	31.076	1.00	32.35
ATOM	711	C	ILE	249	54.448	32.103	27.422	1.00	27.78
ATOM	712	O	ILE	249	55.634	32.297	27.708	1.00	29.37
ATOM	713	N	LEU	250	54.061	31.516	26.289	1.00	29.25
ATOM	714	CA	LEU	250	55.021	31.005	25.319	1.00	24.49
ATOM	715	CB	LEU	250	54.303	30.224	24.214	1.00	23.75
ATOM	716	CG	LEU	250	53.541	28.962	24.629	1.00	23.18
ATOM	717	CD1	LEU	250	52.886	28.353	23.416	1.00	19.94
ATOM	718	CD2	LEU	250	54.475	27.960	25.278	1.00	20.76
ATOM	719	C	LEU	250	55.878	32.116	24.714	1.00	22.20
ATOM	720	O	LEU	250	57.082	31.940	24.528	1.00	23.49
ATOM	721	N	LEU	251	55.256	33.249	24.399	1.00	24.21
ATOM	722	CA	LEU	251	55.980	34.384	23.831	1.00	27.98
ATOM	723	CB	LEU	251	55.010	35.488	23.408	1.00	25.91
ATOM	724	CG	LEU	251	54.287	35.245	22.085	1.00	29.46
ATOM	725	CD1	LEU	251	53.121	36.217	21.939	1.00	35.03
ATOM	726	CD2	LEU	251	55.268	35.364	20.924	1.00	23.65
ATOM	727	C	LEU	251	56.998	34.931	24.828	1.00	26.85
ATOM	728	O	LEU	251	58.165	35.143	24.484	1.00	23.12
ATOM	729	N	LYS	252	56.556	35.145	26.063	1.00	25.33
ATOM	730	CA	LYS	252	57.427	35.644	27.119	1.00	31.33
ATOM	731	CB	LYS	252	56.659	35.723	28.437	1.00	37.06
ATOM	732	CG	LYS	252	55.593	36.805	28.511	1.00	41.75
ATOM	733	CD	LYS	252	54.779	36.619	29.783	1.00	52.64
ATOM	734	CE	LYS	252	53.822	37.767	30.057	1.00	62.60
ATOM	735	NZ	LYS	252	54.503	39.005	30.520	1.00	71.68
ATOM	736	C	LYS	252	58.622	34.705	27.293	1.00	29.08
ATOM	737	O	LYS	252	59.758	35.150	27.460	1.00	35.24
ATOM	738	N	GLY	253	58.355	33.403	27.211	1.00	24.98
ATOM	739	CA	GLY	253	59.407	32.416	27.369	1.00	22.80
ATOM	740	C	GLY	253	60.413	32.282	26.235	1.00	26.90
ATOM	741	O	GLY	253	61.572	31.948	26.489	1.00	31.90
ATOM	742	N	CYS	254	60.013	32.574	24.997	1.00	25.42
ATOM	743	CA	CYS	254	60.932	32.427	23.863	1.00	20.71
ATOM	744	CB	CYS	254	60.314	31.509	22.811	1.00	24.98
ATOM	745	SG	CYS	254	58.976	32.310	21.909	1.00	24.24
ATOM	746	C	CYS	254	61.353	33.716	23.164	1.00	22.79
ATOM	747	O	CYS	254	62.217	33.683	22.282	1.00	23.23
ATOM	748	N	CYS	255	60.757	34.842	23.539	1.00	21.47
ATOM	749	CA	CYS	255	61.061	36.114	22.884	1.00	22.50
ATOM	750	CB	CYS	255	60.318	37.262	23.567	1.00	21.72
ATOM	751	SG	CYS	255	60.353	38.768	22.597	1.00	24.73
ATOM	752	C	CYS	255	62.547	36.457	22.738	1.00	23.81
ATOM	753	O	CYS	255	63.015	36.746	21.632	1.00	23.48
ATOM	754	N	MET	256	63.294	36.402	23.838	1.00	22.13
ATOM	755	CA	MET	256	64.719	36.713	23.792	1.00	22.91
ATOM	756	CB	MET	256	65.286	36.810	25.213	1.00	23.78

ATOM	757	CG	MET	256	66.781	37.094	25.272	1.00	17.41
ATOM	758	SD	MET	256	67.196	38.632	24.415	1.00	23.65
ATOM	759	CE	MET	256	69.010	38.715	24.624	1.00	18.57
ATOM	760	C	MET	256	65.487	35.671	22.980	1.00	21.41
ATOM	761	O	MET	256	66.432	36.005	22.260	1.00	22.01
ATOM	762	N·	GLU	257	65.058	34.415	23.068	1.00	23.18
ATOM	763	CA	GLU	257	65.705	33.323	22.345	1.00	22.90
ATOM	764	CB	GLU	257	65.085	31.989	22.753	1.00	24.00
ATOM	765	CG	GLU	257	65.522	31.521	24.125	1.00	33.44
ATOM	766	CD	GLU	257	64.564	30.527	24.735	1.00	38.03
ATOM	767	OE1	GLU	257	63.977	29.705	24.000	1.00	45.59
ATOM	768	OE2	GLU	257	64.385	30.577	25.965	1.00	45.75
ATOM	769	C	GLU	257	65.595	33.526	20.840	1.00	21.68
ATOM	770	O	GLU	257	66.586	33.421	20.107	1.00	20.02
ATOM	771	N	ILE	258	64.383	33.852	20.391	1.00	17.07
ATOM	772	CA	ILE	258	64.135	34.090	18.973	1.00	17.01
ATOM	773	CB	ILE	258	62.613	34.207	18.684	1.00	17.33
ATOM	774	CG2	ILE	258	62.369	34.758	17.276	1.00	15.91
ATOM	775	CG1	ILE	258	61.952	32.831	18.885	1.00	16.69
ATOM	776	CD1	ILE	258	60.450	32.783	18.632	1.00	16.31
ATOM	777	C	ILE	258	64.911	35.324	18.501	1.00	17.65
ATOM	778	O	ILE	258	65.605	35.263	17.484	1.00	22.58
ATOM	779	N	MET	259	64.865	36.410	19.274	1.00	20.17
ATOM	780	CA	MET	259	65.584	37.628	18.909	1.00	15.03
ATOM	781	CB	MET	259	65.234	38.771	19.856	1.00	20.12
ATOM	782	CG	MET	259	63.791	39.191	19.775	1.00	17.19
ATOM	783	SD	MET	259	63.523	40.795	20.524	1.00	28.92
ATOM	784	CE	MET	259	63.718	40.406	22.261	1.00	19.58
ATOM	785	C	MET	259	67.090	37.402	18.884	1.00	18.84
ATOM	786	O	MET	259	67.783	37.912	17.996	1.00	29.07
ATOM	787	N	SER	260	67.590	36.618	19.837	1.00	21.45
ATOM	788	CA	SER	260	69.019	36.319	19.906	1.00	18.71
ATOM	789	CB	SER	260	69.367	35.595	21.207	1.00	18.35
ATOM	790	OG	SER	260	69.128	36.421	22.329	1.00	25.42
ATOM	791	C	SER	260	69.430	35.469	18.709	1.00	17.83
ATOM	792	O	SER	260	70.497	35.673	18.131	1.00	22.97
ATOM	793	N	LEU	261	68.572	34.522	18.331	1.00	21.66
ATOM	794	CA	LEU	261	68.837	33.663	17.179	1.00	20.98
ATOM	795	CB	LEU	261	67.739	32.608	17.053	1.00	22.66
ATOM	796	CG	LEU	261	67.719	31.759	15.781	1.00	22.12
ATOM	797	CD1	LEU	261	68.998	30.938	15.665	1.00	18.51
ATOM	798	CD2	LEU	261	66.498	30.851	15.800	1.00	19.60
ATOM	799	C	LEU	261	68.873	34.527	15.920	1.00	22.95
ATOM	800	O	LEU	261	69.779	34.402	15.091	1.00	22.62
ATOM	801	N	ARG	262	67.892	35.418	15.798	1.00	22.12
ATOM	802	CA	ARG	262	67.816	36.301	14.643	1.00	25.32
ATOM	803	CB	ARG	262	66.525	37.115	14.677	1.00	21.95

ATOM	804	CG	ARG	262	65.304	36.268	14.362	1.00	21.48
ATOM	805	CD	ARG	262	64.026	37.077	14.345	1.00	19.12
ATOM	806	NE	ARG	262	62.990	36.377	13.599	1.00	22.18
ATOM	807	CZ	ARG	262	61.780	36.862	13.333	1.00	22.88
ATOM	808	NH1	ARG	262	61.429	38.075	13.752	1.00	20.81
ATOM	809	NH2	ARG	262	60.912	36.129	12.648	1.00	20.26
ATOM	810	C	ARG	262	69.044	37.196	14.531	1.00	25.05
ATOM	811	O	ARG	262	69.485	37.513	13.427	1.00	22.98
ATOM	812	N	ALA	263	69.608	37.579	15.676	1.00	26.36
ATOM	813	CA	ALA	263	70.818	38.400	15.705	1.00	27.02
ATOM	814	CB	ALA	263	70.997	39.045	17.087	1.00	25.80
ATOM	815	C	ALA	263	72.026	37.514	15.368	1.00	25.21
ATOM	816	O	ALA	263	72.825	37.844	14.492	1.00	31.14
ATOM	817	N	ALA	264	72.109	36.358	16.027	1.00	25.62
ATOM	818	CA	ALA	264	73.203	35.408	15.828	1.00	23.85
ATOM	819	CB	ALA	264	73.062	34.237	16.794	1.00	17.15
ATOM	820	C	ALA	264	73.345	34.901	14.391	1.00	26.03
ATOM	821	O	ALA	264	74.460	34.773	13.886	1.00	25.66
ATOM	822	N	VAL	265	72.234	34.615	13.723	1.00	25.22
ATOM	823	CA	VAL	265	72.327	34.128	12.350	1.00	28.38
ATOM	824	CB	VAL	265	71.028	33.457	11.857	1.00	24.59
ATOM	825	CG1	VAL	265	70.707	32.264	12.719	1.00	25.53
ATOM	826	CG2	VAL	265	69.881	34.440	11.853	1.00	20.86
ATOM	827	C	VAL	265	72.747	35.235	11.393	1.00	31.46
ATOM	828	O	VAL	265	73.024	34.973	10.222	1.00	34.75
ATOM	829	N	ARG	266	72.795	36.464	11.896	1.00	30.10
ATOM	830	CA	ARG	266	73.211	37.602	11.089	1.00	30.69
ATOM	831	CB	ARG	266	72.170	38.713	11.148	1.00	25.13
ATOM	832	CG	ARG	266	70.976	38.406	10.299	1.00	25.43
ATOM	833	CD	ARG	266	69.999	39.537	10.277	1.00	29.56
ATOM	834	NE	ARG	266	69.032	39.340	9.205	1.00	31.59
ATOM	835	CZ	ARG	266	67.814	39.861	9.197	1.00	31.18
ATOM	836	NH1	ARG	266	67.408	40.611	10.215	1.00	31.01
ATOM	837	NH2	ARG	266	67.012	39.648	8.163	1.00	28.21
ATOM	838	C	ARG	266	74.568	38.111	11.544	1.00	34.28
ATOM	839	O	ARG	266	74.877	39.300	11.423	1.00	41.19
ATOM	840	N	TYR	267	75.362	37.207	12.108	1.00	30.80
ATOM	841	CA	TYR	267	76.694	37.544	12.573	1.00	33.84
ATOM	842	CB	TYR	267	77.202	36.461	13.534	1.00	32.56
ATOM	843	CG	TYR	267	78.674	36.570	13.867	1.00	34.23
ATOM	844	CD1	TYR	267	79.131	37.465	14.835	1.00	32.60
ATOM	845	CE1	TYR	267	80.491	37.593	15.106	1.00	34.90
ATOM	846	CD2	TYR	267	79.615	35.801	13.184	1.00	32.84
ATOM	847	CE2	TYR	267	80.972	35.920	13.446	1.00	34.70
ATOM	848	CZ	TYR	267	81.404	36.816	14.405	1.00	36.21
ATOM	849	OH	TYR	267	82.749	36.940	14.651	1.00	39.48
ATOM	850	C	TYR	267	77.615	37.649	11.360	1.00	37.82

ATOM	851	O	TYR	267	77.648	36.749	10.517	1.00	39.45
ATOM	852	N	ASP	268	78.319	38.769	11.239	1.00	44.62
ATOM	853	CA	ASP	268	79.248	38.963	10.133	1.00	45.56
ATOM	854	CB	ASP	268	79.096	40.366	9.533	1.00	46.62
ATOM	855	CG	ASP	268	80.068	40.624	8.391	1.00	50.96
ATOM	856	OD1	ASP	268	80.204	39.755	7.502	1.00	55.65
ATOM	857	OD2	ASP	268	80.700	41.699	8.384	1.00	52.09
ATOM	858	C	ASP	268	80.675	38.751	10.630	1.00	44.44
ATOM	859	O	ASP	268	81.242	39.614	11.304	1.00	45.68
ATOM	860	N	PRO	269	81.281	37.600	10.296	1.00	45.94
ATOM	861	CD	PRO	269	80.739	36.503	9.476	1.00	43.72
ATOM	862	CA	PRO	269	82.651	37.309	10.730	1.00	46.63
ATOM	863	CB	PRO	269	82.884	35.889	10.208	1.00	43.88
ATOM	864	CG	PRO	269	81.983	35.797	9.018	1.00	44.66
ATOM	865	C	PRO	269	83.682	38.298	10.190	1.00	50.80
ATOM	866	O	PRO	269	84.681	38.578	10.854	1.00	48.56
ATOM	867	N	ALA	270	83.407	38.858	9.012	1.00	55.09
ATOM	868	CA	ALA	270	84.306	39.820	8.374	1.00	55.68
ATOM	869	CB	ALA	270	83.799	40.168	6.974	1.00	53.64
ATOM	870	C	ALA	270	84.528	41.096	9.196	1.00	56.18
ATOM	871	O	ALA	270	85.577	41.729	9.082	1.00	61.07
ATOM	872	N	SER	271	83.543	41.479	10.006	1.00	51.38
ATOM	873	CA	SER	271	83.661	42.678	10.836	1.00	45.90
ATOM	874	CB	SER	271	82.710	43.774	10.346	1.00	44.49
ATOM	875	OG	SER	271	81.360	43.358	10.404	1.00	45.26
ATOM	876	C	SER	271	83.409	42.395	12.317	1.00	46.61
ATOM	877	O	SER	271	83.431	43.309	13.143	1.00	48.31
ATOM	878	N	ASP	272	83.172	41.126	12.642	1.00	46.73
ATOM	879	CA	ASP	272	82.920	40.689	14.013	1.00	42.49
ATOM	880	CB	ASP	272	84.200	40.807	14.849	1.00	42.12
ATOM	881	CG	ASP	272	84.103	40.072	16.169	1.00	50.30
ATOM	882	OD1	ASP	272	83.417	39.028	16.218	1.00	45.10
ATOM	883	OD2	ASP	272	84.708	40.537	17.160	1.00	57.61
ATOM	884	C	ASP	272	81.769	41.465	14.658	1.00	40.95
ATOM	885	O	ASP	272	81.885	41.975	15.779	1.00	42.93
ATOM	886	N	THR	273	80.651	41.531	13.945	1.00	38.57
ATOM	887	CA	THR	273	79.473	42.239	14.425	1.00	40.99
ATOM	888	CB	THR	273	79.262	43.574	13.656	1.00	40.76
ATOM	889	OG1	THR	273	79.240	43.318	12.248	1.00	42.61
ATOM	890	CG2	THR	273	80.373	44.574	13.965	1.00	39.67
ATOM	891	C	THR	273	78.210	41.397	14.251	1.00	39.94
ATOM	892	O	THR	273	78.202	40.419	13.494	1.00	36.66
ATOM	893	N	LEU	274	77.168	41.757	14.993	1.00	36.08
ATOM	894	CA	LEU	274	75.867	41.096	14.907	1.00	34.28
ATOM	895	CB	LEU	274	75.343	40.699	16.292	1.00	30.96
ATOM	896	CG	LEU	274	75.952	39.536	17.068	1.00	30.19
ATOM	897	CD1	LEU	274	75.310	39.472	18.444	1.00	26.29

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ATOM    898  CD2 LEU   274      75.744  38.237  16.309  1.00 27.43
ATOM    899  C   LEU   274      74.943  42.163  14.347  1.00 36.49
ATOM    900  O   LEU   274      75.152  43.354  14.596  1.00 40.27
ATOM    901  N   THR   275      73.923  41.758  13.606  1.00 36.42
ATOM    902  CA  THR   275      72.994  42.731  13.062  1.00 35.07
ATOM    903  CB  THR   275      72.773  42.522  11.556  1.00 36.04
ATOM    904  OG1 THR   275      74.028  42.625  10.875  1.00 41.52
ATOM    905  CG2 THR   275      71.852  43.583  11.008  1.00 36.47
ATOM    906  C   THR   275      71.673  42.655  13.814  1.00 34.32
ATOM    907  O   THR   275      71.055  41.590  13.907  1.00 34.96
ATOM    908  N   LEU   276      71.292  43.767  14.432  1.00 31.79
ATOM    909  CA  LEU   276      70.044  43.840  15.173  1.00 29.47
ATOM    910  CB  LEU   276      70.181  44.766  16.389  1.00 25.29
ATOM    911  CG  LEU   276      71.328  44.501  17.383  1.00 29.01
ATOM    912  CD1 LEU   276      71.179  45.410  18.594  1.00 20.92
ATOM    913  CD2 LEU   276      71.358  43.042  17.834  1.00 22.79
ATOM    914  C   LEU   276      68.966  44.350  14.228  1.00 31.69
ATOM    915  O   LEU   276      69.175  45.335  13.510  1.00 33.87
ATOM    916  N   SER   277      67.862  43.608  14.162  1.00 33.07
ATOM    917  CA  SER   277      66.721  43.935  13.315  1.00 30.61
ATOM    918  CB  SER   277      65.949  45.111  13.909  1.00 22.87
ATOM    919  OG  SER   277      65.587  44.822  15.250  1.00 23.35
ATOM    920  C   SER   277      67.103  44.200  11.860  1.00 31.85
ATOM    921  O   SER   277      66.433  44.958  11.158  1.00 32.13
ATOM    922  N   GLY   278      68.188  43.566  11.421  1.00 32.29
ATOM    923  CA  GLY   278      68.664  43.716  10.058  1.00 37.59
ATOM    924  C   GLY   278      69.063  45.122   9.639  1.00 43.26
ATOM    925  O   GLY   278      69.313  45.358   8.455  1.00 42.60
ATOM    926  N   GLU   279      69.177  46.038  10.599  1.00 43.42
ATOM    927  CA  GLU   279      69.532  47.420  10.291  1.00 44.55
ATOM    928  CB  GLU   279      68.292  48.310  10.394  1.00 44.66
ATOM    929  CG  GLU   279      67.671  48.344  11.783  1.00 54.19
ATOM    930  CD  GLU   279      66.400  49.171  11.845  1.00 64.96
ATOM    931  OE1 GLU   279      65.627  49.174  10.859  1.00 71.43
ATOM    932  OE2 GLU   279      66.167  49.814  12.891  1.00 66.65
ATOM    933  C   GLU   279      70.654  48.019  11.133  1.00 45.52
ATOM    934  O   GLU   279      71.207  49.057  10.772  1.00 51.83
ATOM    935  N   MET   280      71.007  47.373  12.242  1.00 44.66
ATOM    936  CA  MET   280      72.060  47.904  13.105  1.00 34.22
ATOM    937  CB  MET   280      71.470  48.382  14.433  1.00 32.38
ATOM    938  CG  MET   280      72.479  49.058  15.345  1.00 37.87
ATOM    939  SD  MET   280      71.912  49.201  17.052  1.00 41.78
ATOM    940  CE  MET   280      70.650  50.495  16.911  1.00 37.01
ATOM    941  C   MET   280      73.183  46.920  13.386  1.00 35.70
ATOM    942  O   MET   280      72.976  45.900  14.044  1.00 36.99
ATOM    943  N   ALA   281      74.366  47.221  12.867  1.00 34.80
ATOM    944  CA  ALA   281      75.535  46.377  13.091  1.00 35.11
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ATOM   945  CB  ALA  281    76.529  46.527  11.955  1.00 31.27
ATOM   946  C   ALA  281    76.155  46.837  14.406  1.00 35.96
ATOM   947  O   ALA  281    76.478  48.015  14.570  1.00 39.10
ATOM   948  N   VAL  282    76.285  45.916  15.353  1.00 36.46
ATOM   949  CA  VAL  282    76.839  46.246  16.655  1.00 36.05
ATOM   950  CB  VAL  282    75.783  46.090  17.783  1.00 35.60
ATOM   951  CG1 VAL  282    74.633  47.069  17.568  1.00 38.73
ATOM   952  CG2 VAL  282    75.262  44.660  17.844  1.00 33.27
ATOM   953  C   VAL  282    78.062  45.408  16.996  1.00 37.70
ATOM   954  O   VAL  282    78.137  44.223  16.660  1.00 37.45
ATOM   955  N   ALA  283    79.032  46.047  17.637  1.00 39.21
ATOM   956  CA  ALA  283    80.254  45.375  18.048  1.00 43.73
ATOM   957  CB  ALA  283    81.433  46.352  18.047  1.00 42.04
ATOM   958  C   ALA  283    80.060  44.752  19.435  1.00 43.28
ATOM   959  O   ALA  283    79.179  45.157  20.203  1.00 45.77
ATOM   960  N   ARG  284    80.903  43.774  19.744  1.00 41.96
ATOM   961  CA  ARG  284    80.866  43.044  21.004  1.00 44.87
ATOM   962  CB  ARG  284    82.084  42.125  21.087  1.00 46.34
ATOM   963  CG  ARG  284    81.930  40.947  22.017  1.00 51.85
ATOM   964  CD  ARG  284    83.107  40.010  21.844  1.00 60.73
ATOM   965  NE  ARG  284    83.262  39.571  20.455  1.00 54.30
ATOM   966  CZ  ARG  284    83.221  38.300  20.074  1.00 53.66
ATOM   967  NH1 ARG  284    83.032  37.343  20.973  1.00 49.99
ATOM   968  NH2 ARG  284    83.379  37.984  18.797  1.00 47.31
ATOM   969  C   ARG  284    80.803  43.945  22.237  1.00 44.85
ATOM   970  O   ARG  284    79.896  43.806  23.062  1.00 48.26
ATOM   971  N   GLU  285    81.750  44.873  22.349  1.00 41.60
ATOM   972  CA  GLU  285    81.802  45.787  23.484  1.00 41.17
ATOM   973  CB  GLU  285    83.043  46.675  23.392  1.00 39.97
ATOM   974  C   GLU  285    80.538  46.640  23.603  1.00 40.08
ATOM   975  O   GLU  285    80.023  46.849  24.703  1.00 41.16
ATOM   976  N   GLN  286    80.017  47.088  22.463  1.00 38.49
ATOM   977  CA  GLN  286    78.818  47.926  22.425  1.00 36.25
ATOM   978  CB  GLN  286    78.549  48.401  20.997  1.00 39.50
ATOM   979  CG  GLN  286    79.619  49.311  20.424  1.00 43.62
ATOM   980  CD  GLN  286    79.324  49.710  18.987  1.00 49.48
ATOM   981  OE1 GLN  286    79.253  48.856  18.097  1.00 48.41
ATOM   982  NE2 GLN  286    79.125  51.000  18.755  1.00 47.15
ATOM   983  C   GLN  286    77.563  47.255  22.988  1.00 35.40
ATOM   984  O   GLN  286    76.903  47.806  23.871  1.00 31.24
ATOM   985  N   LEU  287    77.234  46.071  22.480  1.00 32.96
ATOM   986  CA  LEU  287    76.055  45.349  22.950  1.00 33.40
ATOM   987  CB  LEU  287    75.767  44.138  22.054  1.00 28.67
ATOM   988  CG  LEU  287    74.466  43.375  22.342  1.00 26.66
ATOM   989  CD1 LEU  287    73.263  44.305  22.244  1.00 19.41
ATOM   990  CD2 LEU  287    74.325  42.221  21.368  1.00 24.84
ATOM   991  C   LEU  287    76.234  44.914  24.406  1.00 34.81
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ATOM    992  O   LEU   287      75.265  44.857  25.175  1.00 33.92
ATOM    993  N   LYS   288      77.476  44.621  24.781  1.00 35.38
ATOM    994  CA  LYS   288      77.814  44.204  26.140  1.00 36.12
ATOM    995  CB  LYS   288      79.296  43.839  26.210  1.00 37.13
ATOM    996  CG  LYS   288      79.762  43.280  27.533  1.00 44.61
ATOM    997  CD  LYS   288      81.256  43.018  27.494  1.00 54.07
ATOM    998  CE  LYS   288      81.757  42.435  28.801  1.00 60.87
ATOM    999  NZ  LYS   288      81.291  41.041  29.039  1.00 61.53
ATOM   1000  C   LYS   288      77.510  45.345  27.109  1.00 36.90
ATOM   1001  O   LYS   288      76.684  45.206  28.013  1.00 40.68
ATOM   1002  N   ASN   289      78.129  46.495  26.863  1.00 35.94
ATOM   1003  CA  ASN   289      77.947  47.680  27.695  1.00 36.12
ATOM   1004  CB  ASN   289      78.982  48.738  27.332  1.00 31.78
ATOM   1005  CG  ASN   289      80.388  48.263  27.569  1.00 40.31
ATOM   1006  OD1 ASN   289      80.627  47.422  28.440  1.00 43.12
ATOM   1007  ND2 ASN   289      81.326  48.758  26.775  1.00 35.36
ATOM   1008  C   ASN   289      76.553  48.277  27.590  1.00 36.98
ATOM   1009  O   ASN   289      76.099  48.959  28.509  1.00 34.29
ATOM   1010  N   GLY   290      75.883  48.032  26.466  1.00 32.65
ATOM   1011  CA  GLY   290      74.541  48.550  26.256  1.00 28.61
ATOM   1012  C   GLY   290      73.497  48.001  27.210  1.00 26.54
ATOM   1013  O   GLY   290      72.362  48.480  27.234  1.00 31.06
ATOM   1014  N   GLY   291      73.861  46.978  27.977  1.00 28.89
ATOM   1015  CA  GLY   291      72.929  46.413  28.937  1.00 25.24
ATOM   1016  C   GLY   291      72.872  44.900  28.997  1.00 28.12
ATOM   1017  O   GLY   291      72.335  44.345  29.955  1.00 31.16
ATOM   1018  N   LEU   292      73.406  44.223  27.985  1.00 29.51
ATOM   1019  CA  LEU   292      73.361  42.766  27.969  1.00 32.79
ATOM   1020  CB  LEU   292      73.304  42.240  26.531  1.00 28.00
ATOM   1021  CG  LEU   292      71.948  42.355  25.827  1.00 23.68
ATOM   1022  CD1 LEU   292      72.004  41.626  24.509  1.00 26.12
ATOM   1023  CD2 LEU   292      70.851  41.764  26.694  1.00 23.36
ATOM   1024  C   LEU   292      74.484  42.085  28.742  1.00 32.33
ATOM   1025  O   LEU   292      74.312  40.967  29.232  1.00 32.22
ATOM   1026  N   GLY   293      75.627  42.750  28.846  1.00 30.31
ATOM   1027  CA  GLY   293      76.751  42.176  29.561  1.00 28.82
ATOM   1028  C   GLY   293      77.238  40.894  28.913  1.00 29.87
ATOM   1029  O   GLY   293      77.432  40.843  27.698  1.00 35.43
ATOM   1030  N   VAL   294      77.392  39.848  29.714  1.00 31.88
ATOM   1031  CA  VAL   294      77.866  38.561  29.217  1.00 35.77
ATOM   1032  CB  VAL   294      78.232  37.590  30.363  1.00 34.29
ATOM   1033  CG1 VAL   294      79.462  38.092  31.095  1.00 37.54
ATOM   1034  CG2 VAL   294      77.065  37.425  31.322  1.00 25.62
ATOM   1035  C   VAL   294      76.882  37.879  28.274  1.00 35.89
ATOM   1036  O   VAL   294      77.263  36.960  27.541  1.00 37.99
ATOM   1037  N   VAL   295      75.619  38.304  28.305  1.00 34.41
ATOM   1038  CA  VAL   295      74.616  37.728  27.413  1.00 32.98
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ATOM   1039  CB  VAL  295      73.208  38.298  27.677  1.00 31.25
ATOM   1040  CG1 VAL  295      72.208  37.706  26.694  1.00 23.54
ATOM   1041  CG2 VAL  295      72.783  37.993  29.101  1.00 23.07
ATOM   1042  C   VAL  295      75.057  38.062  25.993  1.00 33.92
ATOM   1043  O   VAL  295      74.932  37.238  25.090  1.00 36.95
ATOM   1044  N   SER  296      75.625  39.253  25.820  1.00 31.27
ATOM   1045  CA  SER  296      76.118  39.695  24.521  1.00 33.38
ATOM   1046  CB  SER  296      76.667  41.115  24.620  1.00 24.78
ATOM   1047  OG  SER  296      77.368  41.478  23.449  1.00 25.43
ATOM   1048  C   SER  296      77.216  38.748  24.045  1.00 35.86
ATOM   1049  O   SER  296      77.220  38.324  22.886  1.00 39.60
ATOM   1050  N   ASP  297      78.135  38.402  24.943  1.00 37.41
ATOM   1051  CA  ASP  297      79.227  37.490  24.602  1.00 35.39
ATOM   1052  CB  ASP  297      80.147  37.269  25.808  1.00 43.07
ATOM   1053  CG  ASP  297      80.839  38.540  26.266  1.00 45.07
ATOM   1054  OD1 ASP  297      81.175  39.398  25.419  1.00 48.02
ATOM   1055  OD2 ASP  297      81.064  38.670  27.485  1.00 50.13
ATOM   1056  C   ASP  297      78.662  36.145  24.161  1.00 30.87
ATOM   1057  O   ASP  297      79.155  35.534  23.213  1.00 33.92
ATOM   1058  N   ALA  298      77.625  35.698  24.861  1.00 28.96
ATOM   1059  CA  ALA  298      76.971  34.428  24.574  1.00 30.60
ATOM   1060  CB  ALA  298      75.889  34.157  25.610  1.00 27.56
ATOM   1061  C   ALA  298      76.377  34.408  23.163  1.00 33.04
ATOM   1062  O   ALA  298      76.538  33.426  22.426  1.00 32.48
ATOM   1063  N   ILE  299      75.706  35.493  22.786  1.00 30.92
ATOM   1064  CA  ILE  299      75.091  35.588  21.468  1.00 24.71
ATOM   1065  CB  ILE  299      74.138  36.789  21.368  1.00 22.98
ATOM   1066  CG2 ILE  299      73.430  36.786  20.018  1.00 21.90
ATOM   1067  CG1 ILE  299      73.091  36.707  22.477  1.00 20.91
ATOM   1068  CD1 ILE  299      72.266  37.951  22.634  1.00 19.86
ATOM   1069  C   ILE  299      76.168  35.680  20.395  1.00 26.77
ATOM   1070  O   ILE  299      76.036  35.069  19.335  1.00 30.21
ATOM   1071  N   PHE  300      77.238  36.428  20.673  1.00 29.08
ATOM   1072  CA  PHE  300      78.345  36.562  19.726  1.00 28.06
ATOM   1073  CB  PHE  300      79.386  37.565  20.235  1.00 29.06
ATOM   1074  CG  PHE  300      79.289  38.920  19.590  1.00 28.14
ATOM   1075  CD1 PHE  300      78.449  39.896  20.113  1.00 27.20
ATOM   1076  CD2 PHE  300      80.017  39.209  18.437  1.00 29.11
ATOM   1077  CE1 PHE  300      78.332  41.139  19.499  1.00 28.18
ATOM   1078  CE2 PHE  300      79.908  40.450  17.815  1.00 29.07
ATOM   1079  CZ  PHE  300      79.064  41.416  18.348  1.00 22.61
ATOM   1080  C   PHE  300      78.991  35.201  19.485  1.00 29.00
ATOM   1081  O   PHE  300      79.278  34.833  18.344  1.00 30.35
ATOM   1082  N   GLU  301      79.183  34.442  20.560  1.00 31.81
ATOM   1083  CA  GLU  301      79.767  33.111  20.470  1.00 34.96
ATOM   1084  CB  GLU  301      79.962  32.528  21.865  1.00 30.78
ATOM   1085  C   GLU  301      78.850  32.210  19.634  1.00 35.49
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ATOM   1086 O   GLU  301    79.322 31.438 18.793 1.00 35.76
ATOM   1087 N   LEU  302    77.543 32.313 19.869 1.00 32.14
ATOM   1088 CA  LEU  302    76.559 31.522 19.132 1.00 25.56
ATOM   1089 CB  LEU  302    75.147 31.760 19.682 1.00 23.33
ATOM   1090 CG  LEU  302    73.992 31.006 19.010 1.00 28.73
ATOM   1091 CD1 LEU  302    74.093 29.509 19.270 1.00 23.93
ATOM   1092 CD2 LEU  302    72.667 31.551 19.514 1.00 21.32
ATOM   1093 C   LEU  302    76.617 31.885 17.650 1.00 23.10
ATOM   1094 O   LEU  302    76.664 31.001 16.796 1.00 26.79
ATOM   1095 N   GLY  303    76.672 33.181 17.353 1.00 22.79
ATOM   1096 CA  GLY  303    76.745 33.631 15.974 1.00 21.60
ATOM   1097 C   GLY  303    77.978 33.104 15.256 1.00 30.42
ATOM   1098 O   GLY  303    77.889 32.619 14.125 1.00 29.18
ATOM   1099 N   ALA  304    79.132 33.182 15.912 1.00 31.15
ATOM   1100 CA  ALA  304    80.375 32.703 15.313 1.00 35.44
ATOM   1101 CB  ALA  304    81.562 32.995 16.235 1.00 29.16
ATOM   1102 C   ALA  304    80.300 31.208 14.978 1.00 35.15
ATOM   1103 O   ALA  304    80.705 30.785 13.891 1.00 37.13
ATOM   1104 N   SER  305    79.753 30.414 15.892 1.00 33.91
ATOM   1105 CA  SER  305    79.638 28.979 15.663 1.00 36.39
ATOM   1106 CB  SER  305    79.395 28.237 16.980 1.00 32.71
ATOM   1107 OG  SER  305    78.265 28.749 17.663 1.00 48.66
ATOM   1108 C   SER  305    78.558 28.619 14.641 1.00 37.61
ATOM   1109 O   SER  305    78.747 27.697 13.845 1.00 39.92
ATOM   1110 N   LEU  306    77.443 29.349 14.651 1.00 38.21
ATOM   1111 CA  LEU  306    76.350 29.092 13.714 1.00 35.65
ATOM   1112 CB  LEU  306    75.094 29.894 14.077 1.00 25.49
ATOM   1113 CG  LEU  306    74.209 29.374 15.212 1.00 26.18
ATOM   1114 CD1 LEU  306    72.988 30.262 15.361 1.00 23.40
ATOM   1115 CD2 LEU  306    73.777 27.952 14.921 1.00 23.57
ATOM   1116 C   LEU  306    76.723 29.356 12.258 1.00 38.05
ATOM   1117 O   LEU  306    76.092 28.809 11.353 1.00 37.22
ATOM   1118 N   SER  307    77.743 30.185 12.030 1.00 40.41
ATOM   1119 CA  SER  307    78.199 30.511 10.677 1.00 40.85
ATOM   1120 CB  SER  307    79.415 31.442 10.736 1.00 37.32
ATOM   1121 OG  SER  307    79.086 32.678 11.344 1.00 56.20
ATOM   1122 C   SER  307    78.550 29.270  9.852 1.00 39.87
ATOM   1123 O   SER  307    78.221 29.191  8.670 1.00 44.27
ATOM   1124 N   ALA  308    79.207 28.305 10.487 1.00 39.29
ATOM   1125 CA  ALA  308    79.609 27.066  9.826 1.00 33.10
ATOM   1126 CB  ALA  308    80.607 26.310 10.696 1.00 33.37
ATOM   1127 C   ALA  308    78.403 26.177  9.502 1.00 34.07
ATOM   1128 O   ALA  308    78.467 25.340  8.600 1.00 40.61
ATOM   1129 N   PHE  309    77.305 26.368 10.230 1.00 31.85
ATOM   1130 CA  PHE  309    76.095 25.581 10.015 1.00 35.24
ATOM   1131 CB  PHE  309    75.149 25.698 11.219 1.00 33.69
ATOM   1132 CG  PHE  309    75.618 24.954 12.437 1.00 36.16
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ATOM   1133 CD1 PHE   309    76.785 25.327 13.090 1.00 43.79
ATOM   1134 CD2 PHE   309    74.903 23.867 12.922 1.00 38.03
ATOM   1135 CE1 PHE   309    77.237 24.627 14.210 1.00 41.12
ATOM   1136 CE2 PHE   309    75.346 23.161 14.040 1.00 41.08
ATOM   1137 CZ  PHE   309    76.514 23.543 14.683 1.00 38.37
ATOM   1138 C   PHE   309    75.361 25.934  8.720 1.00 36.31
ATOM   1139 O   PHE   309    74.633 25.095  8.173 1.00 37.84
ATOM   1140 N   ASN   310    75.567 27.155  8.225 1.00 35.22
ATOM   1141 CA  ASN   310    74.933 27.625  6.988 1.00 43.66
ATOM   1142 CB  ASN   310    75.536 26.930  5.760 1.00 54.13
ATOM   1143 CG  ASN   310    76.980 27.339  5.501 1.00 68.29
ATOM   1144 OD1 ASN   310    77.297 28.527  5.412 1.00 74.62
ATOM   1145 ND2 ASN   310    77.859 26.348  5.352 1.00 68.85
ATOM   1146 C   ASN   310    73.430 27.385  7.013 1.00 38.37
ATOM   1147 O   ASN   310    72.882 26.735  6.123 1.00 36.70
ATOM   1148 N   LEU   311    72.780 27.865  8.062 1.00 35.22
ATOM   1149 CA  LEU   311    71.345 27.690  8.206 1.00 34.32
ATOM   1150 CB  LEU   311    70.895 28.054  9.630 1.00 30.19
ATOM   1151 CG  LEU   311    71.458 27.306 10.845 1.00 26.76
ATOM   1152 CD1 LEU   311    70.792 27.847 12.104 1.00 21.37
ATOM   1153 CD2 LEU   311    71.217 25.813 10.722 1.00 22.95
ATOM   1154 C   LEU   311    70.601 28.561  7.206 1.00 34.64
ATOM   1155 O   LEU   311    71.087 29.625  6.820 1.00 37.70
ATOM   1156 N   ASP   312    69.444 28.091  6.752 1.00 29.40
ATOM   1157 CA  ASP   312    68.634 28.867  5.823 1.00 28.65
ATOM   1158 CB  ASP   312    68.302 28.061  4.545 1.00 24.79
ATOM   1159 CG  ASP   312    67.459 26.804  4.804 1.00 21.47
ATOM   1160 OD1 ASP   312    66.994 26.549  5.932 1.00 27.92
ATOM   1161 OD2 ASP   312    67.250 26.057  3.832 1.00 27.53
ATOM   1162 C   ASP   312    67.380 29.346  6.557 1.00 25.92
ATOM   1163 O   ASP   312    67.167 28.985  7.717 1.00 26.98
ATOM   1164 N   ASP   313    66.540 30.122  5.878 1.00 21.78
ATOM   1165 CA  ASP   313    65.315 30.653  6.471 1.00 22.89
ATOM   1166 CB  ASP   313    64.517 31.458  5.439 1.00 29.19
ATOM   1167 CG  ASP   313    65.216 32.739  5.025 1.00 36.82
ATOM   1168 OD1 ASP   313    65.985 33.285  5.845 1.00 41.51
ATOM   1169 OD2 ASP   313    64.997 33.203  3.883 1.00 44.19
ATOM   1170 C   ASP   313    64.421 29.587  7.085 1.00 25.09
ATOM   1171 O   ASP   313    63.778 29.829  8.110 1.00 27.60
ATOM   1172 N   THR   314    64.363 28.420  6.449 1.00 20.90
ATOM   1173 CA  THR   314    63.538 27.322  6.942 1.00 22.71
ATOM   1174 CB  THR   314    63.408 26.208  5.884 1.00 22.07
ATOM   1175 OG1 THR   314    62.825 26.746  4.693 1.00 23.15
ATOM   1176 CG2 THR   314    62.542 25.079  6.401 1.00 18.17
ATOM   1177 C   THR   314    64.080 26.734  8.249 1.00 19.95
ATOM   1178 O   THR   314    63.326 26.477  9.182 1.00 22.40
ATOM   1179 N   GLU   315    65.391 26.536  8.318 1.00 20.01
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ATOM   1180  CA  GLU  315     65.997  25.987   9.523  1.00 19.40
ATOM   1181  CB  GLU  315     67.454  25.626   9.254  1.00 11.72
ATOM   1182  CG  GLU  315     67.544  24.440   8.322  1.00 13.43
ATOM   1183  CD  GLU  315     68.925  24.157   7.791  1.00 18.51
ATOM   1184  OE1 GLU  315     69.666  25.107   7.451  1.00 23.24
ATOM   1185  OE2 GLU  315     69.254  22.962   7.673  1.00 24.23
ATOM   1186  C   GLU  315     65.833  26.960  10.681  1.00 20.12
ATOM   1187  O   GLU  315     65.425  26.570  11.777  1.00 20.53
ATOM   1188  N   VAL  316     66.055  28.240  10.406  1.00 21.79
ATOM   1189  CA  VAL  316     65.898  29.270  11.425  1.00 18.14
ATOM   1190  CB  VAL  316     66.346  30.659  10.898  1.00 18.97
ATOM   1191  CG1 VAL  316     66.040  31.741  11.929  1.00 19.08
ATOM   1192  CG2 VAL  316     67.840  30.641  10.537  1.00 17.97
ATOM   1193  C   VAL  316     64.430  29.332  11.880  1.00 22.54
ATOM   1194  O   VAL  316     64.146  29.433  13.072  1.00 26.47
ATOM   1195  N   ALA  317     63.505  29.242  10.924  1.00 19.66
ATOM   1196  CA  ALA  317     62.076  29.286  11.216  1.00 16.99
ATOM   1197  CB  ALA  317     61.279  29.329   9.926  1.00 17.79
ATOM   1198  C   ALA  317     61.619  28.105  12.063  1.00 14.12
ATOM   1199  O   ALA  317     60.808  28.263  12.970  1.00 17.04
ATOM   1200  N   LEU  318     62.104  26.911  11.740  1.00 20.37
ATOM   1201  CA  LEU  318     61.725  25.714  12.485  1.00 21.12
ATOM   1202  CB  LEU  318     62.131  24.448  11.718  1.00 21.80
ATOM   1203  CG  LEU  318     61.364  24.265  10.398  1.00 18.11
ATOM   1204  CD1 LEU  318     61.946  23.125   9.594  1.00 16.79
ATOM   1205  CD2 LEU  318     59.891  24.024  10.676  1.00 12.66
ATOM   1206  C   LEU  318     62.335  25.752  13.880  1.00 22.03
ATOM   1207  O   LEU  318     61.688  25.373  14.858  1.00 21.35
ATOM   1208  N   LEU  319     63.564  26.257  13.964  1.00 20.03
ATOM   1209  CA  LEU  319     64.260  26.395  15.236  1.00 20.24
ATOM   1210  CB  LEU  319     65.657  26.960  15.001  1.00 19.07
ATOM   1211  CG  LEU  319     66.594  27.108  16.196  1.00 27.61
ATOM   1212  CD1 LEU  319     66.518  25.883  17.083  1.00 29.73
ATOM   1213  CD2 LEU  319     68.012  27.326  15.699  1.00 20.98
ATOM   1214  C   LEU  319     63.422  27.334  16.118  1.00 21.16
ATOM   1215  O   LEU  319     63.144  27.032  17.279  1.00 26.65
ATOM   1216  N   GLN  320     62.958  28.439  15.539  1.00 20.77
ATOM   1217  CA  GLN  320     62.119  29.390  16.265  1.00 17.87
ATOM   1218  CB  GLN  320     61.781  30.594  15.388  1.00 18.74
ATOM   1219  CG  GLN  320     62.957  31.496  15.111  1.00 21.07
ATOM   1220  CD  GLN  320     62.637  32.617  14.150  1.00 22.88
ATOM   1221  OE1 GLN  320     61.571  32.653  13.528  1.00 26.07
ATOM   1222  NE2 GLN  320     63.574  33.537  14.006  1.00 20.11
ATOM   1223  C   GLN  320     60.829  28.728  16.730  1.00 19.08
ATOM   1224  O   GLN  320     60.368  28.976  17.844  1.00 23.39
ATOM   1225  N   ALA  321     60.251  27.886  15.876  1.00 22.71
ATOM   1226  CA  ALA  321     59.010  27.187  16.201  1.00 18.86
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ATOM   1227  CB  ALA   321      58.495  26.422  14.993  1.00 17.22
ATOM   1228  C   ALA   321      59.220  26.235  17.376  1.00 19.85
ATOM   1229  O   ALA   321      58.362  26.119  18.250  1.00 19.60
ATOM   1230  N   VAL   322      60.368  25.561  17.396  1.00 20.25
ATOM   1231  CA  VAL   322      60.693  24.628  18.469  1.00 21.32
ATOM   1232  CB  VAL   322      61.956  23.800  18.116  1.00 20.46
ATOM   1233  CG1 VAL   322      62.418  22.971  19.304  1.00 20.39
ATOM   1234  CG2 VAL   322      61.662  22.890  16.930  1.00 16.83
ATOM   1235  C   VAL   322      60.880  25.393  19.785  1.00 20.67
ATOM   1236  O   VAL   322      60.444  24.941  20.850  1.00 21.28
ATOM   1237  N   LEU   323      61.492  26.574  19.701  1.00 21.14
ATOM   1238  CA  LEU   323      61.722  27.417  20.869  1.00 22.94
ATOM   1239  CB  LEU   323      62.610  28.608  20.511  1.00 16.12
ATOM   1240  CG  LEU   323      64.051  28.291  20.115  1.00 22.28
ATOM   1241  CD1 LEU   323      64.719  29.532  19.528  1.00 14.87
ATOM   1242  CD2 LEU   323      64.816  27.750  21.320  1.00 21.55
ATOM   1243  C   LEU   323      60.398  27.932  21.410  1.00 22.55
ATOM   1244  O   LEU   323      60.185  27.986  22.615  1.00 25.21
ATOM   1245  N   LEU   324      59.507  28.300  20.502  1.00 24.15
ATOM   1246  CA  LEU   324      58.200  28.827  20.855  1.00 19.88
ATOM   1247  CB  LEU   324      57.499  29.384  19.608  1.00 15.20
ATOM   1248  CG  LEU   324      56.067  29.908  19.767  1.00 17.21
ATOM   1249  CD1 LEU   324      56.021  31.161  20.637  1.00 15.99
ATOM   1250  CD2 LEU   324      55.496  30.208  18.395  1.00 20.03
ATOM   1251  C   LEU   324      57.311  27.795  21.536  1.00 19.83
ATOM   1252  O   LEU   324      56.767  28.064  22.609  1.00 24.47
ATOM   1253  N   MET   325      57.197  26.603  20.956  1.00 25.02
ATOM   1254  CA  MET   325      56.339  25.563  21.522  1.00 26.72
ATOM   1255  CB  MET   325      55.823  24.644  20.410  1.00 30.03
ATOM   1256  CG  MET   325      55.129  25.358  19.241  1.00 25.09
ATOM   1257  SD  MET   325      53.714  26.409  19.672  1.00 27.29
ATOM   1258  CE  MET   325      52.503  25.220  20.084  1.00 20.67
ATOM   1259  C   MET   325      56.995  24.736  22.635  1.00 28.94
ATOM   1260  O   MET   325      56.881  23.510  22.672  1.00 32.94
ATOM   1261  N   SER   326      57.642  25.418  23.569  1.00 29.36
ATOM   1262  CA  SER   326      58.311  24.759  24.680  1.00 31.62
ATOM   1263  CB  SER   326      59.554  25.559  25.064  1.00 38.13
ATOM   1264  OG  SER   326      60.277  24.949  26.119  1.00 48.99
ATOM   1265  C   SER   326      57.361  24.653  25.871  1.00 33.69
ATOM   1266  O   SER   326      56.620  25.594  26.166  1.00 33.66
ATOM   1267  N   THR   327      57.356  23.499  26.536  1.00 38.27
ATOM   1268  CA  THR   327      56.497  23.306  27.701  1.00 38.98
ATOM   1269  CB  THR   327      55.875  21.896  27.730  1.00 33.30
ATOM   1270  OG1 THR   327      56.908  20.911  27.627  1.00 44.01
ATOM   1271  CG2 THR   327      54.888  21.722  26.587  1.00 38.09
ATOM   1272  C   THR   327      57.239  23.570  29.018  1.00 42.88
ATOM   1273  O   THR   327      56.702  23.325  30.099  1.00 43.36
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ATOM    1274  N   ASP   328      58.462  24.091  28.924  1.00 45.92
ATOM    1275  CA  ASP   328      59.268  24.410  30.104  1.00 49.59
ATOM    1276  CB  ASP   328      60.760  24.411  29.760  1.00 59.87
ATOM    1277  CG  ASP   328      61.273  23.040  29.387  1.00 75.73
ATOM    1278  OD1 ASP   328      62.008  22.939  28.382  1.00 85.81
ATOM    1279  OD2 ASP   328      60.946  22.063  30.098  1.00 85.56
ATOM    1280  C   ASP   328      58.873  25.767  30.673  1.00 48.50
ATOM    1281  O   ASP   328      59.725  26.609  30.961  1.00 57.50
ATOM    1282  N   ARG   329      57.569  25.980  30.805  1.00 49.62
ATOM    1283  CA  ARG   329      57.032  27.222  31.340  1.00 50.52
ATOM    1284  CB  ARG   329      56.400  28.080  30.230  1.00 53.57
ATOM    1285  CG  ARG   329      57.376  28.828  29.324  1.00 51.09
ATOM    1286  CD  ARG   329      57.897  27.951  28.204  1.00 49.73
ATOM    1287  NE  ARG   329      58.692  28.699  27.233  1.00 47.44
ATOM    1288  CZ  ARG   329      60.005  28.569  27.080  1.00 54.28
ATOM    1289  NH1 ARG   329      60.688  27.722  27.839  1.00 58.35
ATOM    1290  NH2 ARG   329      60.631  29.256  26.136  1.00 51.92
ATOM    1291  C   ARG   329      55.970  26.870  32.375  1.00 51.90
ATOM    1292  O   ARG   329      55.378  25.790  32.324  1.00 50.77
ATOM    1293  N   SER   330      55.728  27.784  33.303  1.00 50.56
ATOM    1294  CA  SER   330      54.744  27.564  34.349  1.00 50.67
ATOM    1295  CB  SER   330      55.271  28.108  35.678  1.00 46.64
ATOM    1296  C   SER   330      53.404  28.213  34.004  1.00 47.63
ATOM    1297  O   SER   330      53.371  29.309  33.440  1.00 48.02
ATOM    1298  N   GLY   331      52.314  27.496  34.277  1.00 44.44
ATOM    1299  CA  GLY   331      50.977  28.023  34.044  1.00 38.77
ATOM    1300  C   GLY   331      50.236  27.710  32.756  1.00 41.74
ATOM    1301  O   GLY   331      49.147  28.246  32.537  1.00 49.57
ATOM    1302  N   LEU   332      50.783  26.841  31.912  1.00 39.75
ATOM    1303  CA  LEU   332      50.123  26.502  30.651  1.00 37.55
ATOM    1304  CB  LEU   332      51.107  25.829  29.694  1.00 32.36
ATOM    1305  CG  LEU   332      52.268  26.659  29.153  1.00 34.40
ATOM    1306  CD1 LEU   332      53.207  25.749  28.379  1.00 30.22
ATOM    1307  CD2 LEU   332      51.742  27.786  28.277  1.00 23.33
ATOM    1308  C   LEU   332      48.921  25.589  30.834  1.00 36.73
ATOM    1309  O   LEU   332      48.987  24.608  31.577  1.00 39.29
ATOM    1310  N   LEU   333      47.822  25.925  30.168  1.00 36.07
ATOM    1311  CA  LEU   333      46.615  25.107  30.215  1.00 39.58
ATOM    1312  CB  LEU   333      45.384  25.906  29.754  1.00 41.08
ATOM    1313  CG  LEU   333      44.601  26.883  30.644  1.00 47.59
ATOM    1314  CD1 LEU   333      44.268  26.213  31.961  1.00 45.65
ATOM    1315  CD2 LEU   333      45.366  28.171  30.874  1.00 47.42
ATOM    1316  C   LEU   333      46.791  23.911  29.278  1.00 40.00
ATOM    1317  O   LEU   333      46.690  22.754  29.689  1.00 44.77
ATOM    1318  N   CYA   334      47.102  24.213  28.022  1.00 37.70
ATOM    1319  CA  CYA   334      47.265  23.209  26.968  1.00 36.04
ATOM    1320  CB  CYA   334      46.815  23.808  25.635  1.00 40.64
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ATOM	1321	SG	CYA	334	45.280	24.738	25.758	1.00	44.31
ATOM	1322	AS	CYA	334	43.972	22.946	25.380	1.00	76.30
ATOM	1323	C	CYA	334	48.668	22.617	26.815	1.00	34.91
ATOM	1324	O	CYA	334	49.237	22.615	25.722	1.00	37.63
ATOM	1325	N	VAL	335	49.189	22.056	27.903	1.00	35.43
ATOM	1326	CA	VAL	335	50.518	21.452	27.909	1.00	34.27
ATOM	1327	CB	VAL	335	50.861	20.868	29.298	1.00	34.21
ATOM	1328	CG1	VAL	335	52.261	20.258	29.292	1.00	33.66
ATOM	1329	CG2	VAL	335	50.755	21.945	30.362	1.00	31.77
ATOM	1330	C	VAL	335	50.662	20.349	26.865	1.00	37.14
ATOM	1331	O	VAL	335	51.639	20.320	26.114	1.00	37.59
ATOM	1332	N	ASP	336	49.683	19.451	26.813	1.00	39.99
ATOM	1333	CA	ASP	336	49.705	18.339	25.866	1.00	41.64
ATOM	1334	CB	ASP	336	48.532	17.392	26.146	1.00	54.27
ATOM	1335	CG	ASP	336	48.596	16.118	25.322	1.00	67.42
ATOM	1336	OD1	ASP	336	47.915	16.049	24.274	1.00	70.98
ATOM	1337	OD2	ASP	336	49.337	15.191	25.717	1.00	76.88
ATOM	1338	C	ASP	336	49.702	18.762	24.393	1.00	38.31
ATOM	1339	O	ASP	336	50.469	18.229	23.586	1.00	37.46
ATOM	1340	N	LYS	337	48.853	19.729	24.052	1.00	30.23
ATOM	1341	CA	LYS	337	48.740	20.211	22.676	1.00	29.21
ATOM	1342	CB	LYS	337	47.561	21.189	22.559	1.00	30.53
ATOM	1343	CG	LYS	337	47.012	21.360	21.162	1.00	51.63
ATOM	1344	CD	LYS	337	45.636	21.997	21.186	1.00	59.57
ATOM	1345	CE	LYS	337	45.066	22.115	19.774	1.00	66.05
ATOM	1346	NZ	LYS	337	43.673	22.693	19.776	1.00	67.20
ATOM	1347	C	LYS	337	50.054	20.873	22.249	1.00	28.33
ATOM	1348	O	LYS	337	50.581	20.594	21.170	1.00	26.08
ATOM	1349	N	ILE	338	50.609	21.696	23.141	1.00	26.74
ATOM	1350	CA	ILE	338	51.873	22.390	22.902	1.00	25.42
ATOM	1351	CB	ILE	338	52.177	23.379	24.052	1.00	23.57
ATOM	1352	CG2	ILE	338	53.559	23.991	23.874	1.00	22.59
ATOM	1353	CG1	ILE	338	51.105	24.471	24.096	1.00	23.57
ATOM	1354	CD1	ILE	338	51.157	25.362	25.333	1.00	24.30
ATOM	1355	C	ILE	338	53.018	21.382	22.768	1.00	29.20
ATOM	1356	O	ILE	338	53.905	21.537	21.916	1.00	31.59
ATOM	1357	N	GLU	339	52.977	20.340	23.595	1.00	34.82
ATOM	1358	CA	GLU	339	53.980	19.277	23.597	1.00	34.23
ATOM	1359	CB	GLU	339	53.639	18.256	24.681	1.00	40.38
ATOM	1360	CG	GLU	339	54.785	17.354	25.072	1.00	54.98
ATOM	1361	CD	GLU	339	55.644	17.964	26.178	1.00	71.26
ATOM	1362	OE1	GLU	339	56.766	18.444	25.858	1.00	77.82
ATOM	1363	OE2	GLU	339	55.170	17.985	27.349	1.00	65.14
ATOM	1364	C	GLU	339	53.972	18.582	22.231	1.00	34.42
ATOM	1365	O	GLU	339	55.018	18.431	21.590	1.00	29.41
ATOM	1366	N	LYS	340	52.778	18.189	21.786	1.00	34.13
ATOM	1367	CA	LYS	340	52.592	17.513	20.502	1.00	32.05

ATOM	1368	CB	LYS	340	51.121	17.105	20.325	1.00	34.59
ATOM	1369	C	LYS	340	53.064	18.390	19.337	1.00	32.56
ATOM	1370	O	LYS	340	53.762	17.913	18.441	1.00	32.93
ATOM	1371	N	SER	341	52.725	19.677	19.374	1.00	31.42
ATOM	1372	CA	SER	341	53.134	20.621	18.334	1.00	27.79
ATOM	1373	CB	SER	341	52.559	22.009	18.601	1.00	27.85
ATOM	1374	OG	SER	341	51.149	21.966	18.579	1.00	47.20
ATOM	1375	C	SER	341	54.647	20.713	18.240	1.00	26.01
ATOM	1376	O	SER	341	55.205	20.706	17.139	1.00	27.10
ATOM	1377	N	GLN	342	55.318	20.794	19.389	1.00	24.25
ATOM	1378	CA	GLN	342	56.771	20.875	19.392	1.00	27.16
ATOM	1379	CB	GLN	342	57.309	21.089	20.799	1.00	25.60
ATOM	1380	CG	GLN	342	58.768	21.466	20.777	1.00	27.99
ATOM	1381	CD	GLN	342	59.407	21.429	22.133	1.00	29.58
ATOM	1382	OE1	GLN	342	60.123	22.356	22.513	1.00	31.18
ATOM	1383	NE2	GLN	342	59.184	20.345	22.868	1.00	29.17
ATOM	1384	C	GLN	342	57.377	19.609	18.786	1.00	28.45
ATOM	1385	O	GLN	342	58.378	19.675	18.062	1.00	29.79
ATOM	1386	N	GLU	343	56.777	18.458	19.078	1.00	26.58
ATOM	1387	CA	GLU	343	57.251	17.190	18.525	1.00	30.07
ATOM	1388	CB	GLU	343	56.462	16.016	19.114	1.00	40.79
ATOM	1389	CG	GLU	343	56.812	15.700	20.568	1.00	61.22
ATOM	1390	CD	GLU	343	55.951	14.594	21.166	1.00	71.76
ATOM	1391	OE1	GLU	343	55.472	13.719	20.405	1.00	76.73
ATOM	1392	OE2	GLU	343	55.758	14.601	22.403	1.00	74.09
ATOM	1393	C	GLU	343	57.097	17.225	17.001	1.00	25.87
ATOM	1394	O	GLU	343	58.008	16.842	16.260	1.00	27.26
ATOM	1395	N	ALA	344	55.947	17.727	16.550	1.00	23.70
ATOM	1396	CA	ALA	344	55.647	17.853	15.124	1.00	22.16
ATOM	1397	CB	ALA	344	54.275	18.489	14.927	1.00	21.18
ATOM	1398	C	ALA	344	56.729	18.694	14.454	1.00	21.24
ATOM	1399	O	ALA	344	57.303	18.284	13.438	1.00	26.47
ATOM	1400	N	TYR	345	57.048	19.840	15.055	1.00	22.48
ATOM	1401	CA	TYR	345	58.073	20.738	14.531	1.00	21.41
ATOM	1402	CB	TYR	345	58.085	22.059	15.304	1.00	20.10
ATOM	1403	CG	TYR	345	57.023	23.015	14.830	1.00	15.87
ATOM	1404	CD1	TYR	345	56.004	23.434	15.682	1.00	10.54
ATOM	1405	CE1	TYR	345	54.983	24.259	15.225	1.00	17.09
ATOM	1406	CD2	TYR	345	57.003	23.448	13.505	1.00	16.86
ATOM	1407	CE2	TYR	345	55.991	24.269	13.036	1.00	16.84
ATOM	1408	CZ	TYR	345	54.984	24.668	13.896	1.00	17.97
ATOM	1409	OH	TYR	345	53.963	25.455	13.406	1.00	27.11
ATOM	1410	C	TYR	345	59.465	20.120	14.548	1.00	24.43
ATOM	1411	O	TYR	345	60.238	20.291	13.597	1.00	24.69
ATOM	1412	N	LEU	346	59.777	19.401	15.621	1.00	26.75
ATOM	1413	CA	LEU	346	61.074	18.746	15.767	1.00	25.06
ATOM	1414	CB	LEU	346	61.207	18.108	17.150	1.00	24.59

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ATOM   1415  CG  LEU  346    61.637  19.076  18.252  1.00 26.46
ATOM   1416  CD1 LEU  346    61.387  18.468  19.610  1.00 26.46
ATOM   1417  CD2 LEU  346    63.101  19.437  18.076  1.00 21.78
ATOM   1418  C   LEU  346    61.322  17.713  14.683  1.00 23.24
ATOM   1419  O   LEU  346    62.416  17.645  14.127  1.00 27.54
ATOM   1420  N   LEU  347    60.314  16.900  14.395  1.00 25.75
ATOM   1421  CA  LEU  347    60.437  15.881  13.356  1.00 25.41
ATOM   1422  CB  LEU  347    59.208  14.970  13.330  1.00 23.78
ATOM   1423  CG  LEU  347    59.302  13.713  14.190  1.00 31.85
ATOM   1424  CD1 LEU  347    58.004  12.928  14.089  1.00 39.88
ATOM   1425  CD2 LEU  347    60.483  12.864  13.738  1.00 27.65
ATOM   1426  C   LEU  347    60.611  16.535  11.998  1.00 23.22
ATOM   1427  O   LEU  347    61.468  16.133  11.211  1.00 28.58
ATOM   1428  N   ALA  348    59.784  17.542  11.731  1.00 26.40
ATOM   1429  CA  ALA  348    59.840  18.273  10.474  1.00 23.85
ATOM   1430  CB  ALA  348    58.732  19.324  10.433  1.00 25.27
ATOM   1431  C   ALA  348    61.210  18.924  10.337  1.00 23.69
ATOM   1432  O   ALA  348    61.847  18.835   9.288  1.00 29.11
ATOM   1433  N   PHE  349    61.678  19.506  11.438  1.00 24.71
ATOM   1434  CA  PHE  349    62.973  20.181  11.493  1.00 20.48
ATOM   1435  CB  PHE  349    63.164  20.772  12.900  1.00 17.84
ATOM   1436  CG  PHE  349    64.334  21.721  13.031  1.00 14.90
ATOM   1437  CD1 PHE  349    65.109  22.069  11.933  1.00 17.58
ATOM   1438  CD2 PHE  349    64.651  22.269  14.271  1.00 24.77
ATOM   1439  CE1 PHE  349    66.185  22.944  12.063  1.00 20.26
ATOM   1440  CE2 PHE  349    65.727  23.147  14.413  1.00 23.83
ATOM   1441  CZ  PHE  349    66.494  23.486  13.299  1.00 20.36
ATOM   1442  C   PHE  349    64.084  19.181  11.159  1.00 23.43
ATOM   1443  O   PHE  349    64.916  19.427  10.278  1.00 24.35
ATOM   1444  N   GLU  350    64.057  18.028  11.820  1.00 25.79
ATOM   1445  CA  GLU  350    65.060  16.991  11.606  1.00 26.75
ATOM   1446  CB  GLU  350    64.813  15.822  12.567  1.00 29.56
ATOM   1447  CG  GLU  350    65.774  14.661  12.391  1.00 39.94
ATOM   1448  CD  GLU  350    65.574  13.549  13.407  1.00 45.06
ATOM   1449  OE1 GLU  350    64.413  13.192  13.715  1.00 49.26
ATOM   1450  OE2 GLU  350    66.593  13.017  13.887  1.00 56.67
ATOM   1451  C   GLU  350    65.051  16.494  10.162  1.00 26.95
ATOM   1452  O   GLU  350    66.096  16.398   9.513  1.00 28.77
ATOM   1453  N   HIS  351    63.858  16.219   9.652  1.00 22.56
ATOM   1454  CA  HIS  351    63.699  15.728   8.294  1.00 22.20
ATOM   1455  CB  HIS  351    62.263  15.265   8.083  1.00 22.47
ATOM   1456  CG  HIS  351    61.881  14.106   8.947  1.00 23.61
ATOM   1457  CD2 HIS  351    62.633  13.300   9.739  1.00 27.65
ATOM   1458  ND1 HIS  351    60.585  13.653   9.069  1.00 26.13
ATOM   1459  CE1 HIS  351    60.548  12.629   9.898  1.00 22.87
ATOM   1460  NE2 HIS  351    61.779  12.393  10.319  1.00 27.53
ATOM   1461  C   HIS  351    64.135  16.764   7.259  1.00 21.76
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ATOM   1462  O   HIS   351    64.708  16.419   6.226  1.00 27.02
ATOM   1463  N   TYR   352    63.909  18.041   7.555  1.00 18.26
ATOM   1464  CA  TYR   352    64.327  19.101   6.649  1.00 16.94
ATOM   1465  CB  TYR   352    63.749  20.455   7.066  1.00 19.07
ATOM   1466  CG  TYR   352    64.107  21.534   6.081  1.00 21.11
ATOM   1467  CD1 TYR   352    63.518  21.564   4.819  1.00 21.33
ATOM   1468  CE1 TYR   352    63.921  22.482   3.859  1.00 21.06
ATOM   1469  CD2 TYR   352    65.105  22.462   6.367  1.00 22.07
ATOM   1470  CE2 TYR   352    65.515  23.388   5.412  1.00 25.40
ATOM   1471  CZ  TYR   352    64.921  23.384   4.161  1.00 21.90
ATOM   1472  OH  TYR   352    65.334  24.268   3.197  1.00 23.57
ATOM   1473  C   TYR   352    65.853  19.156   6.657  1.00 18.49
ATOM   1474  O   TYR   352    66.487  19.323   5.609  1.00 24.99
ATOM   1475  N   VAL   353    66.451  19.008   7.836  1.00 24.64
ATOM   1476  CA  VAL   353    67.904  19.011   7.955  1.00 22.20
ATOM   1477  CB  VAL   353    68.350  18.925   9.440  1.00 23.72
ATOM   1478  CG1 VAL   353    69.838  18.597   9.546  1.00 21.24
ATOM   1479  CG2 VAL   353    68.063  20.245  10.142  1.00 20.07
ATOM   1480  C   VAL   353    68.452  17.829   7.146  1.00 25.07
ATOM   1481  O   VAL   353    69.467  17.955   6.457  1.00 24.75
ATOM   1482  N   ASN   354    67.768  16.690   7.221  1.00 24.59
ATOM   1483  CA  ASN   354    68.171  15.502   6.474  1.00 25.64
ATOM   1484  CB  ASN   354    67.223  14.331   6.751  1.00 26.05
ATOM   1485  CG  ASN   354    67.368  13.763   8.151  1.00 30.27
ATOM   1486  OD1 ASN   354    66.443  13.139   8.672  1.00 33.71
ATOM   1487  ND2 ASN   354    68.529  13.959   8.765  1.00 34.78
ATOM   1488  C   ASN   354    68.143  15.813   4.981  1.00 30.50
ATOM   1489  O   ASN   354    69.042  15.423   4.233  1.00 33.73
ATOM   1490  N   HIS   355    67.098  16.519   4.555  1.00 30.54
ATOM   1491  CA  HIS   355    66.926  16.901   3.157  1.00 26.02
ATOM   1492  CB  HIS   355    65.535  17.521   2.953  1.00 29.93
ATOM   1493  CG  HIS   355    65.367  18.217   1.638  1.00 37.91
ATOM   1494  CD2 HIS   355    65.654  19.486   1.264  1.00 31.26
ATOM   1495  ND1 HIS   355    64.861  17.593   0.518  1.00 32.67
ATOM   1496  CE1 HIS   355    64.843  18.447  -0.488  1.00 33.22
ATOM   1497  NE2 HIS   355    65.322  19.601  -0.061  1.00 32.69
ATOM   1498  C   HIS   355    68.009  17.851   2.652  1.00 24.29
ATOM   1499  O   HIS   355    68.381  17.798   1.484  1.00 26.82
ATOM   1500  N   ARG   356    68.484  18.735   3.526  1.00 29.72
ATOM   1501  CA  ARG   356    69.516  19.711   3.167  1.00 26.65
ATOM   1502  CB  ARG   356    69.593  20.804   4.225  1.00 22.74
ATOM   1503  CG  ARG   356    68.409  21.735   4.222  1.00 21.64
ATOM   1504  CD  ARG   356    68.757  23.024   3.524  1.00 28.04
ATOM   1505  NE  ARG   356    69.550  23.900   4.380  1.00 33.79
ATOM   1506  CZ  ARG   356    70.508  24.716   3.952  1.00 29.26
ATOM   1507  NH1 ARG   356    70.814  24.776   2.667  1.00 29.08
ATOM   1508  NH2 ARG   356    71.136  25.493   4.816  1.00 33.61
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ATOM	1509	C	ARG	356	70.904	19.115	2.950	1.00	27.58
ATOM	1510	O	ARG	356	71.757	19.740	2.312	1.00	31.44
ATOM	1511	N	LYS	357	71.140	17.937	3.519	1.00	30.56
ATOM	1512	CA	LYS	357	72.422	17.244	3.390	1.00	34.56
ATOM	1513	CB	LYS	357	72.500	16.518	2.043	1.00	39.66
ATOM	1514	CG	LYS	357	71.476	15.402	1.871	1.00	42.16
ATOM	1515	CD	LYS	357	71.674	14.676	0.550	1.00	54.23
ATOM	1516	CE	LYS	357	70.691	13.523	0.371	1.00	61.97
ATOM	1517	NZ	LYS	357	69.288	13.974	0.162	1.00	65.88
ATOM	1518	C	LYS	357	73.665	18.119	3.606	1.00	36.73
ATOM	1519	O	LYS	357	74.522	18.248	2.728	1.00	40.70
ATOM	1520	N	HIS	358	73.738	18.732	4.786	1.00	33.69
ATOM	1521	CA	HIS	358	74.863	19.581	5.163	1.00	33.59
ATOM	1522	CB	HIS	358	74.660	20.155	6.571	1.00	32.07
ATOM	1523	CG	HIS	358	73.593	21.200	6.666	1.00	29.74
ATOM	1524	CD2	HIS	358	72.245	21.098	6.736	1.00	23.35
ATOM	1525	ND1	HIS	358	73.876	22.547	6.731	1.00	28.13
ATOM	1526	CE1	HIS	358	72.752	23.231	6.834	1.00	26.94
ATOM	1527	NE2	HIS	358	71.747	22.373	6.838	1.00	23.32
ATOM	1528	C	HIS	358	76.121	18.720	5.180	1.00	37.98
ATOM	1529	O	HIS	358	76.087	17.581	5.654	1.00	41.07
ATOM	1530	N	ASN	359	77.231	19.261	4.690	1.00	44.20
ATOM	1531	CA	ASN	359	78.492	18.523	4.676	1.00	49.72
ATOM	1532	CB	ASN	359	79.406	19.053	3.572	1.00	46.66
ATOM	1533	C	ASN	359	79.174	18.648	6.039	1.00	51.77
ATOM	1534	O	ASN	359	80.356	18.985	6.122	1.00	57.32
ATOM	1535	N	ILE	360	78.414	18.383	7.101	1.00	51.04
ATOM	1536	CA	ILE	360	78.906	18.471	8.477	1.00	48.24
ATOM	1537	CB	ILE	360	78.340	19.721	9.207	1.00	47.20
ATOM	1538	CG2	ILE	360	78.781	19.741	10.673	1.00	43.50
ATOM	1539	CG1	ILE	360	78.777	21.005	8.491	1.00	45.94
ATOM	1540	CD1	ILE	360	78.157	22.262	9.050	1.00	43.00
ATOM	1541	C	ILE	360	78.462	17.222	9.239	1.00	47.23
ATOM	1542	O	ILE	360	77.272	16.901	9.278	1.00	45.13
ATOM	1543	N	PRO	361	79.416	16.490	9.838	1.00	48.61
ATOM	1544	CD	PRO	361	80.869	16.705	9.729	1.00	50.93
ATOM	1545	CA	PRO	361	79.129	15.270	10.599	1.00	45.46
ATOM	1546	CB	PRO	361	80.524	14.725	10.927	1.00	49.01
ATOM	1547	CG	PRO	361	81.402	15.307	9.862	1.00	54.41
ATOM	1548	C	PRO	361	78.330	15.514	11.879	1.00	36.54
ATOM	1549	O	PRO	361	78.666	16.394	12.672	1.00	39.83
ATOM	1550	N	HIS	362	77.282	14.716	12.075	1.00	31.35
ATOM	1551	CA	HIS	362	76.430	14.798	13.264	1.00	33.34
ATOM	1552	CB	HIS	362	77.246	14.495	14.524	1.00	33.77
ATOM	1553	CG	HIS	362	78.129	13.292	14.397	1.00	34.40
ATOM	1554	CD2	HIS	362	77.837	11.999	14.130	1.00	32.60
ATOM	1555	ND1	HIS	362	79.501	13.362	14.506	1.00	36.14

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ATOM   1556  CE1 HIS   362    80.017  12.160  14.311  1.00 36.26
ATOM   1557  NE2 HIS   362    79.029  11.316  14.080  1.00 35.73
ATOM   1558  C   HIS   362    75.778  16.164  13.389  1.00 33.55
ATOM   1559  O   HIS   362    75.539  16.652  14.495  1.00 31.93
ATOM   1560  N   PHE   363    75.449  16.748  12.240  1.00 35.83
ATOM   1561  CA  PHE   363    74.834  18.067  12.166  1.00 30.93
ATOM   1562  CB  PHE   363    74.464  18.394  10.712  1.00 28.82
ATOM   1563  CG  PHE   363    73.959  19.797  10.514  1.00 26.59
ATOM   1564  CD1 PHE   363    74.846  20.843  10.301  1.00 26.96
ATOM   1565  CD2 PHE   363    72.596  20.076  10.575  1.00 27.51
ATOM   1566  CE1 PHE   363    74.384  22.151  10.155  1.00 31.83
ATOM   1567  CE2 PHE   363    72.124  21.378  10.433  1.00 26.65
ATOM   1568  CZ  PHE   363    73.019  22.417  10.223  1.00 24.42
ATOM   1569  C   PHE   363    73.613  18.235  13.063  1.00 28.73
ATOM   1570  O   PHE   363    73.550  19.174  13.848  1.00 25.33
ATOM   1571  N   TRP   364    72.663  17.310  12.969  1.00 22.89
ATOM   1572  CA  TRP   364    71.443  17.405  13.760  1.00 24.19
ATOM   1573  CB  TRP   364    70.481  16.254  13.439  1.00 26.31
ATOM   1574  CG  TRP   364    69.198  16.275  14.228  1.00 20.24
ATOM   1575  CD2 TRP   364    68.213  17.325  14.262  1.00 24.50
ATOM   1576  CE2 TRP   364    67.175  16.894  15.120  1.00 25.84
ATOM   1577  CE3 TRP   364    68.106  18.583  13.652  1.00 25.83
ATOM   1578  CD1 TRP   364    68.731  15.289  15.040  1.00 23.61
ATOM   1579  NE1 TRP   364    67.515  15.648  15.579  1.00 32.26
ATOM   1580  CZ2 TRP   364    66.048  17.674  15.386  1.00 21.95
ATOM   1581  CZ3 TRP   364    66.979  19.360  13.919  1.00 20.73
ATOM   1582  CH2 TRP   364    65.967  18.899  14.779  1.00 22.37
ATOM   1583  C   TRP   364    71.663  17.551  15.267  1.00 28.84
ATOM   1584  O   TRP   364    71.246  18.554  15.839  1.00 31.25
ATOM   1585  N   PRO   365    72.305  16.568  15.932  1.00 29.69
ATOM   1586  CD  PRO   365    72.790  15.245  15.497  1.00 30.89
ATOM   1587  CA  PRO   365    72.499  16.748  17.373  1.00 25.62
ATOM   1588  CB  PRO   365    73.195  15.451  17.810  1.00 25.50
ATOM   1589  CG  PRO   365    73.804  14.915  16.560  1.00 34.15
ATOM   1590  C   PRO   365    73.320  18.002  17.698  1.00 24.07
ATOM   1591  O   PRO   365    73.079  18.654  18.711  1.00 23.58
ATOM   1592  N   LYS   366    74.250  18.365  16.820  1.00 24.09
ATOM   1593  CA  LYS   366    75.063  19.562  17.027  1.00 29.44
ATOM   1594  CB  LYS   366    76.131  19.681  15.945  1.00 27.18
ATOM   1595  CG  LYS   366    77.341  18.802  16.149  1.00 23.71
ATOM   1596  CD  LYS   366    78.304  19.019  15.001  1.00 27.50
ATOM   1597  CE  LYS   366    79.624  18.329  15.231  1.00 35.88
ATOM   1598  NZ  LYS   366    80.550  18.591  14.097  1.00 41.92
ATOM   1599  C   LYS   366    74.195  20.820  17.012  1.00 32.76
ATOM   1600  O   LYS   366    74.326  21.694  17.873  1.00 36.13
ATOM   1601  N   LEU   367    73.307  20.907  16.028  1.00 33.70
ATOM   1602  CA  LEU   367    72.409  22.041  15.905  1.00 30.60
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ATOM   1603  CB  LEU   367    71.636 21.955 14.587  1.00 24.26
ATOM   1604  CG  LEU   367    70.675 23.103 14.274  1.00 32.42
ATOM   1605  CD1 LEU   367    71.394 24.440 14.404  1.00 24.78
ATOM   1606  CD2 LEU   367    70.098 22.924 12.878  1.00 28.84
ATOM   1607  C   LEU   367    71.450 22.015 17.087  1.00 31.90
ATOM   1608  O   LEU   367    71.113 23.052 17.655  1.00 39.20
ATOM   1609  N   LEU   368    71.051 20.812 17.485  1.00 33.86
ATOM   1610  CA  LEU   368    70.144 20.617 18.608  1.00 32.97
ATOM   1611  CB  LEU   368    69.866 19.123 18.759  1.00 34.22
ATOM   1612  CG  LEU   368    68.458 18.633 19.084  1.00 38.15
ATOM   1613  CD1 LEU   368    67.400 19.449 18.345  1.00 27.75
ATOM   1614  CD2 LEU   368    68.374 17.154 18.733  1.00 31.51
ATOM   1615  C   LEU   368    70.793 21.181 19.875  1.00 35.29
ATOM   1616  O   LEU   368    70.128 21.806 20.703  1.00 36.16
ATOM   1617  N   MET   369    72.106 21.001 19.994  1.00 41.13
ATOM   1618  CA  MET   369    72.857 21.504 21.139  1.00 40.92
ATOM   1619  CB  MET   369    74.283 20.955 21.115  1.00 43.32
ATOM   1620  CG  MET   369    74.383 19.497 21.545  1.00 50.01
ATOM   1621  SD  MET   369    75.997 18.770 21.190  1.00 56.63
ATOM   1622  CE  MET   369    77.032 19.596 22.409  1.00 62.26
ATOM   1623  C   MET   369    72.872 23.032 21.186  1.00 43.46
ATOM   1624  O   MET   369    73.137 23.619 22.233  1.00 47.51
ATOM   1625  N   LYS   370    72.594 23.673 20.053  1.00 41.60
ATOM   1626  CA  LYS   370    72.561 25.131 19.988  1.00 34.48
ATOM   1627  CB  LYS   370    72.689 25.623 18.546  1.00 31.53
ATOM   1628  CG  LYS   370    74.012 25.278 17.896  1.00 30.76
ATOM   1629  CD  LYS   370    75.168 25.774 18.731  1.00 32.16
ATOM   1630  CE  LYS   370    76.488 25.388 18.116  1.00 31.08
ATOM   1631  NZ  LYS   370    77.604 25.822 18.993  1.00 51.52
ATOM   1632  C   LYS   370    71.269 25.652 20.606  1.00 36.35
ATOM   1633  O   LYS   370    71.197 26.806 21.032  1.00 39.02
ATOM   1634  N   VAL   371    70.248 24.804 20.652  1.00 34.33
ATOM   1635  CA  VAL   371    68.975 25.186 21.249  1.00 36.27
ATOM   1636  CB  VAL   371    67.885 24.097 21.046  1.00 36.15
ATOM   1637  CG1 VAL   371    66.600 24.487 21.758  1.00 32.69
ATOM   1638  CG2 VAL   371    67.612 23.892 19.567  1.00 33.75
ATOM   1639  C   VAL   371    69.196 25.423 22.745  1.00 41.55
ATOM   1640  O   VAL   371    68.638 26.367 23.316  1.00 40.82
ATOM   1641  N   THR   372    70.018 24.581 23.378  1.00 40.42
ATOM   1642  CA  THR   372    70.300 24.733 24.804  1.00 41.69
ATOM   1643  CB  THR   372    71.037 23.499 25.397  1.00 42.36
ATOM   1644  OG1 THR   372    72.125 23.133 24.548  1.00 53.57
ATOM   1645  CG2 THR   372    70.090 22.313 25.523  1.00 43.54
ATOM   1646  C   THR   372    71.090 26.021 25.048  1.00 38.75
ATOM   1647  O   THR   372    70.858 26.714 26.042  1.00 37.51
ATOM   1648  N   ASP   373    71.987 26.360 24.122  1.00 36.73
ATOM   1649  CA  ASP   373    72.768 27.594 24.223  1.00 30.96
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ATOM   1650  CB  ASP   373    73.741  27.732  23.047  1.00 31.26
ATOM   1651  CG  ASP   373    74.865  26.707  23.085  1.00 35.85
ATOM   1652  OD1 ASP   373    75.523  26.508  22.042  1.00 36.73
ATOM   1653  OD2 ASP   373    75.102  26.103  24.153  1.00 39.92
ATOM   1654  C   ASP   373    71.797  28.769  24.230  1.00 31.30
ATOM   1655  O   ASP   373    71.926  29.689  25.039  1.00 35.37
ATOM   1656  N   LEU   374    70.804  28.711  23.348  1.00 27.72
ATOM   1657  CA  LEU   374    69.783  29.751  23.257  1.00 28.18
ATOM   1658  CB  LEU   374    68.881  29.521  22.042  1.00 28.41
ATOM   1659  CG  LEU   374    69.391  30.055  20.703  1.00 29.87
ATOM   1660  CD1 LEU   374    68.533  29.520  19.563  1.00 25.44
ATOM   1661  CD2 LEU   374    69.385  31.581  20.728  1.00 23.74
ATOM   1662  C   LEU   374    68.946  29.786  24.527  1.00 28.61
ATOM   1663  O   LEU   374    68.516  30.859  24.968  1.00 29.51
ATOM   1664  N   ARG   375    68.690  28.615  25.105  1.00 32.32
ATOM   1665  CA  ARG   375    67.925  28.532  26.345  1.00 33.19
ATOM   1666  CB  ARG   375    67.758  27.074  26.776  1.00 41.70
ATOM   1667  CG  ARG   375    66.360  26.524  26.609  1.00 51.03
ATOM   1668  CD  ARG   375    65.979  26.416  25.153  1.00 60.16
ATOM   1669  NE  ARG   375    64.648  25.840  24.987  1.00 74.28
ATOM   1670  CZ  ARG   375    64.324  24.587  25.296  1.00 79.34
ATOM   1671  NH1 ARG   375    65.233  23.756  25.796  1.00 80.84
ATOM   1672  NH2 ARG   375    63.084  24.157  25.092  1.00 77.44
ATOM   1673  C   ARG   375    68.692  29.296  27.423  1.00 32.02
ATOM   1674  O   ARG   375    68.132  30.150  28.108  1.00 30.42
ATOM   1675  N   MET   376    69.993  29.020  27.521  1.00 32.30
ATOM   1676  CA  MET   376    70.860  29.668  28.499  1.00 36.82
ATOM   1677  CB  MET   376    72.278  29.097  28.433  1.00 45.36
ATOM   1678  CG  MET   376    72.375  27.645  28.866  1.00 66.71
ATOM   1679  SD  MET   376    74.078  27.057  28.966  1.00 89.64
ATOM   1680  CE  MET   376    74.256  26.229  27.400  1.00 85.51
ATOM   1681  C   MET   376    70.880  31.182  28.310  1.00 37.49
ATOM   1682  O   MET   376    70.780  31.928  29.281  1.00 39.99
ATOM   1683  N   ILE   377    71.008  31.630  27.060  1.00 33.14
ATOM   1684  CA  ILE   377    71.009  33.057  26.740  1.00 25.98
ATOM   1685  CB  ILE   377    71.181  33.291  25.211  1.00 22.79
ATOM   1686  CG2 ILE   377    70.838  34.727  24.834  1.00 25.29
ATOM   1687  CG1 ILE   377    72.606  32.947  24.785  1.00 21.42
ATOM   1688  CD1 ILE   377    72.816  32.971  23.282  1.00 19.37
ATOM   1689  C   ILE   377    69.690  33.664  27.228  1.00 27.11
ATOM   1690  O   ILE   377    69.676  34.727  27.856  1.00 28.09
ATOM   1691  N   GLY   378    68.584  32.969  26.975  1.00 29.34
ATOM   1692  CA  GLY   378    67.292  33.457  27.418  1.00 30.41
ATOM   1693  C   GLY   378    67.233  33.532  28.934  1.00 36.85
ATOM   1694  O   GLY   378    66.672  34.481  29.489  1.00 36.44
ATOM   1695  N   ALA   379    67.837  32.547  29.603  1.00 37.98
ATOM   1696  CA  ALA   379    67.869  32.483  31.066  1.00 36.44
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ATOM   1697 CB  ALA   379    68.415 31.133 31.528 1.00 35.63
ATOM   1698 C   ALA   379    68.712 33.613 31.642 1.00 34.14
ATOM   1699 O   ALA   379    68.259 34.343 32.523 1.00 35.15
ATOM   1700 N   CYA   380    69.941 33.747 31.144 1.00 36.66
ATOM   1701 CA  CYA   380    70.860 34.795 31.587 1.00 37.27
ATOM   1702 CB  CYA   380    72.172 34.728 30.810 1.00 36.85
ATOM   1703 SG  CYA   380    73.201 33.338 31.250 1.00 52.80
ATOM   1704 AS  CYA   380    74.942 33.593 29.823 1.00 65.79
ATOM   1705 C   CYA   380    70.230 36.165 31.398 1.00 38.70
ATOM   1706 O   CYA   380    70.337 37.033 32.270 1.00 45.73
ATOM   1707 N   HIS   381    69.555 36.354 30.265 1.00 37.32
ATOM   1708 CA  HIS   381    68.906 37.623 29.994 1.00 32.11
ATOM   1709 CB  HIS   381    68.377 37.687 28.565 1.00 25.76
ATOM   1710 CG  HIS   381    67.596 38.932 28.285 1.00 20.30
ATOM   1711 CD2 HIS   381    67.998 40.200 28.044 1.00 16.31
ATOM   1712 ND1 HIS   381    66.218 38.971 28.336 1.00 22.06
ATOM   1713 CE1 HIS   381    65.807 40.210 28.146 1.00 21.20
ATOM   1714 NE2 HIS   381    66.869 40.976 27.968 1.00 22.58
ATOM   1715 C   HIS   381    67.773 37.893 30.980 1.00 32.68
ATOM   1716 O   HIS   381    67.602 39.024 31.431 1.00 33.38
ATOM   1717 N   ALA   382    66.982 36.873 31.296 1.00 31.27
ATOM   1718 CA  ALA   382    65.884 37.045 32.243 1.00 29.39
ATOM   1719 CB  ALA   382    65.121 35.742 32.409 1.00 25.18
ATOM   1720 C   ALA   382    66.420 37.531 33.596 1.00 34.32
ATOM   1721 O   ALA   382    65.902 38.501 34.160 1.00 37.79
ATOM   1722 N   SER   383    67.483 36.893 34.085 1.00 36.88
ATOM   1723 CA  SER   383    68.100 37.268 35.361 1.00 39.74
ATOM   1724 CB  SER   383    69.233 36.297 35.719 1.00 42.58
ATOM   1725 OG  SER   383    68.734 35.010 36.049 1.00 61.85
ATOM   1726 C   SER   383    68.638 38.697 35.311 1.00 36.49
ATOM   1727 O   SER   383    68.443 39.480 36.243 1.00 43.81
ATOM   1728 N   ARG   384    69.305 39.036 34.213 1.00 33.66
ATOM   1729 CA  ARG   384    69.866 40.367 34.043 1.00 35.39
ATOM   1730 CB  ARG   384    70.800 40.404 32.835 1.00 29.29
ATOM   1731 CG  ARG   384    71.590 41.679 32.731 1.00 29.20
ATOM   1732 CD  ARG   384    72.881 41.435 31.995 1.00 37.73
ATOM   1733 NE  ARG   384    73.657 42.663 31.850 1.00 48.97
ATOM   1734 CZ  ARG   384    74.346 43.245 32.826 1.00 45.41
ATOM   1735 NH1 ARG   384    74.371 42.715 34.038 1.00 44.51
ATOM   1736 NH2 ARG   384    75.008 44.368 32.584 1.00 41.43
ATOM   1737 C   ARG   384    68.777 41.431 33.916 1.00 39.45
ATOM   1738 O   ARG   384    68.913 42.537 34.444 1.00 44.47
ATOM   1739 N   PHE   385    67.673 41.077 33.270 1.00 36.42
ATOM   1740 CA  PHE   385    66.568 42.007 33.099 1.00 34.68
ATOM   1741 CB  PHE   385    65.444 41.393 32.262 1.00 30.21
ATOM   1742 CG  PHE   385    64.263 42.304 32.081 1.00 29.48
ATOM   1743 CD1 PHE   385    64.289 43.313 31.127 1.00 29.70
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ATOM   1744  CD2 PHE   385      63.130  42.161  32.873  1.00 28.04
ATOM   1745  CE1 PHE   385      63.203  44.169  30.966  1.00 33.50
ATOM   1746  CE2 PHE   385      62.040  43.012  32.718  1.00 31.35
ATOM   1747  CZ  PHE   385      62.077  44.017  31.763  1.00 32.08
ATOM   1748  C   PHE   385      66.040  42.412  34.468  1.00 35.76
ATOM   1749  O·  PHE   385      65.761  43.590  34.693  1.00 40.58
ATOM   1750  N   LEU   386      65.906  41.441  35.373  1.00 37.55
ATOM   1751  CA  LEU   386      65.429  41.706  36.735  1.00 41.01
ATOM   1752  CB  LEU   386      65.394  40.413  37.563  1.00 42.30
ATOM   1753  CG  LEU   386      64.240  39.434  37.317  1.00 43.34
ATOM   1754  CD1 LEU   386      64.559  38.066  37.912  1.00 43.50
ATOM   1755  CD2 LEU   386      62.946  39.992  37.899  1.00 44.01
ATOM   1756  C   LEU   386      66.342  42.735  37.405  1.00 40.08
ATOM   1757  O   LEU   386      65.875  43.632  38.112  1.00 42.08
ATOM   1758  N   HIS   387      67.643  42.613  37.153  1.00 34.86
ATOM   1759  CA  HIS   387      68.631  43.537  37.700  1.00 39.09
ATOM   1760  CB  HIS   387      70.046  43.034  37.421  1.00 39.99
ATOM   1761  CG  HIS   387      70.402  41.791  38.172  1.00 56.37
ATOM   1762  CD2 HIS   387      71.384  40.881  37.974  1.00 60.11
ATOM   1763  ND1 HIS   387      69.711  41.370  39.290  1.00 60.40
ATOM   1764  CE1 HIS   387      70.252  40.255  39.746  1.00 61.89
ATOM   1765  NE2 HIS   387      71.269  39.937  38.966  1.00 63.96
ATOM   1766  C   HIS   387      68.446  44.928  37.101  1.00 41.00
ATOM   1767  O   HIS   387      68.492  45.927  37.817  1.00 46.99
ATOM   1768  N   MET   388      68.213  44.982  35.792  1.00 39.15
ATOM   1769  CA  MET   388      68.011  46.243  35.088  1.00 35.32
ATOM   1770  CB  MET   388      67.676  45.992  33.612  1.00 35.12
ATOM   1771  CG  MET   388      68.810  45.442  32.753  1.00 37.24
ATOM   1772  SD  MET   388      68.259  45.150  31.051  1.00 41.75
ATOM   1773  CE  MET   388      69.274  43.748  30.573  1.00 35.23
ATOM   1774  C   MET   388      66.880  47.048  35.733  1.00 36.52
ATOM   1775  O   MET   388      66.994  48.265  35.888  1.00 43.39
ATOM   1776  N   LYS   389      65.792  46.371  36.103  1.00 38.05
ATOM   1777  CA  LYS   389      64.637  47.025  36.729  1.00 42.88
ATOM   1778  CB  LYS   389      63.481  46.035  36.866  1.00 47.83
ATOM   1779  CG  LYS   389      62.835  45.627  35.560  1.00 52.36
ATOM   1780  CD  LYS   389      62.040  44.340  35.731  1.00 61.84
ATOM   1781  CE  LYS   389      60.978  44.451  36.814  1.00 69.04
ATOM   1782  NZ  LYS   389      60.254  43.162  36.987  1.00 70.00
ATOM   1783  C   LYS   389      64.983  47.587  38.107  1.00 43.99
ATOM   1784  O   LYS   389      64.455  48.621  38.525  1.00 44.22
ATOM   1785  N   VAL   390      65.851  46.878  38.816  1.00 45.50
ATOM   1786  CA  VAL   390      66.290  47.286  40.142  1.00 47.76
ATOM   1787  CB  VAL   390      67.152  46.186  40.804  1.00 46.30
ATOM   1788  CG1 VAL   390      67.796  46.706  42.079  1.00 49.20
ATOM   1789  CG2 VAL   390      66.305  44.962  41.097  1.00 42.69
ATOM   1790  C   VAL   390      67.109  48.571  40.070  1.00 47.25
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ATOM   1791 O   VAL   390    66.811 49.540 40.760  1.00 48.67
ATOM   1792 N   GLU   391    68.115 48.580 39.199  1.00 44.11
ATOM   1793 CA  GLU   391    69.009 49.721 39.047  1.00 45.79
ATOM   1794 CB  GLU   391    70.266 49.311 38.273  1.00 45.78
ATOM   1795 CG  GLU   391    70.998 48.091 38.830  1.00 57.29
ATOM   1796 CD  GLU  ·391    71.479 48.268 40.261  1.00 61.20
ATOM   1797 OE1 GLU   391    71.845 49.400 40.646  1.00 57.29
ATOM   1798 OE2 GLU   391    71.496 47.263 41.001  1.00 63.69
ATOM   1799 C   GLU   391    68.410 50.959 38.391  1.00 49.16
ATOM   1800 O   GLU   391    68.463 52.055 38.956  1.00 58.82
ATOM   1801 N   CYA   392    67.802 50.782 37.224  1.00 49.75
ATOM   1802 CA  CYA   392    67.255 51.908 36.475  1.00 45.56
ATOM   1803 CB  CYA   392    67.667 51.768 35.016  1.00 44.82
ATOM   1804 SG  CYA   392    69.443 51.771 34.913  1.00 50.78
ATOM   1805 AS  CYA   392    69.929 50.778 33.022  1.00 53.29
ATOM   1806 C   CYA   392    65.771 52.200 36.601  1.00 44.35
ATOM   1807 O   CYA   392    64.988 51.324 36.962  1.00 44.10
ATOM   1808 N   PRO   393    65.378 53.469 36.365  1.00 45.52
ATOM   1809 CD  PRO   393    66.275 54.603 36.075  1.00 37.38
ATOM   1810 CA  PRO   393    63.982 53.916 36.444  1.00 45.41
ATOM   1811 CB  PRO   393    64.105 55.438 36.376  1.00 43.33
ATOM   1812 CG  PRO   393    65.329 55.644 35.542  1.00 39.89
ATOM   1813 C   PRO   393    63.108 53.376 35.318  1.00 44.89
ATOM   1814 O   PRO   393    63.556 53.239 34.175  1.00 45.60
ATOM   1815 N   THR   394    61.843 53.135 35.647  1.00 47.52
ATOM   1816 CA  THR   394    60.853 52.603 34.713  1.00 53.06
ATOM   1817 CB  THR   394    59.459 52.583 35.371  1.00 61.06
ATOM   1818 OG1 THR   394    59.609 52.470 36.794  1.00 72.44
ATOM   1819 CG2 THR   394    58.640 51.401 34.860  1.00 61.05
ATOM   1820 C   THR   394    60.767 53.373 33.392  1.00 49.98
ATOM   1821 O   THR   394    60.507 52.786 32.339  1.00 51.06
ATOM   1822 N   GLU   395    61.024 54.676 33.452  1.00 48.55
ATOM   1823 CA  GLU   395    60.970 55.548 32.282  1.00 44.21
ATOM   1824 CB  GLU   395    61.258 56.987 32.697  1.00 41.66
ATOM   1825 C   GLU   395    61.899 55.134 31.134  1.00 43.46
ATOM   1826 O   GLU   395    61.684 55.527 29.988  1.00 44.17
ATOM   1827 N   LEU   396    62.934 54.359 31.449  1.00 41.05
ATOM   1828 CA  LEU   396    63.898 53.899 30.448  1.00 39.55
ATOM   1829 CB  LEU   396    65.270 53.708 31.106  1.00 35.03
ATOM   1830 CG  LEU   396    66.296 54.834 30.945  1.00 40.06
ATOM   1831 CD1 LEU   396    65.638 56.200 31.055  1.00 39.06
ATOM   1832 CD2 LEU   396    67.398 54.669 31.978  1.00 32.78
ATOM   1833 C   LEU   396    63.468 52.602 29.757  1.00 38.50
ATOM   1834 O   LEU   396    64.106 52.150 28.804  1.00 34.72
ATOM   1835 N   PHE   397    62.364 52.028 30.225  1.00 38.76
ATOM   1836 CA  PHE   397    61.860 50.774 29.683  1.00 36.57
ATOM   1837 CB  PHE   397    61.610 49.775 30.819  1.00 33.96
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ATOM   1838  CG  PHE  397      62.842  49.421  31.607  1.00 36.95
ATOM   1839  CD1 PHE  397      63.331  50.280  32.587  1.00 34.61
ATOM   1840  CD2 PHE  397      63.523  48.234  31.362  1.00 37.14
ATOM   1841  CE1 PHE  397      64.481  49.964  33.310  1.00 31.57
ATOM   1842  CE2 PHE  397      64.675  47.908  32.082  1.00 37.85
ATOM   1843  CZ  PHE  397      65.153  48.776  33.056  1.00 33.08
ATOM   1844  C   PHE  397      60.584  50.921  28.858  1.00 35.65
ATOM   1845  O   PHE  397      59.519  51.249  29.399  1.00 35.75
ATOM   1846  N   PRO  398      60.672  50.685  27.536  1.00 35.78
ATOM   1847  CD  PRO  398      61.891  50.367  26.767  1.00 32.81
ATOM   1848  CA  PRO  398      59.503  50.786  26.658  1.00 33.94
ATOM   1849  CB  PRO  398      60.041  50.297  25.315  1.00 33.91
ATOM   1850  CG  PRO  398      61.488  50.707  25.356  1.00 33.09
ATOM   1851  C   PRO  398      58.434  49.840  27.210  1.00 34.98
ATOM   1852  O   PRO  398      58.753  48.729  27.654  1.00 35.76
ATOM   1853  N   PRO  399      57.163  50.267  27.219  1.00 37.67
ATOM   1854  CD  PRO  399      56.661  51.578  26.776  1.00 38.02
ATOM   1855  CA  PRO  399      56.070  49.433  27.733  1.00 36.86
ATOM   1856  CB  PRO  399      54.803  50.183  27.291  1.00 34.14
ATOM   1857  CG  PRO  399      55.282  51.240  26.310  1.00 37.00
ATOM   1858  C   PRO  399      56.085  47.970  27.273  1.00 37.06
ATOM   1859  O   PRO  399      55.967  47.063  28.099  1.00 37.07
ATOM   1860  N   LEU  400      56.299  47.738  25.980  1.00 35.13
ATOM   1861  CA  LEU  400      56.327  46.374  25.445  1.00 35.86
ATOM   1862  CB  LEU  400      56.314  46.385  23.914  1.00 31.49
ATOM   1863  CG  LEU  400      56.181  45.017  23.227  1.00 30.73
ATOM   1864  CD1 LEU  400      54.901  44.330  23.674  1.00 21.35
ATOM   1865  CD2 LEU  400      56.197  45.183  21.720  1.00 25.42
ATOM   1866  C   LEU  400      57.542  45.597  25.958  1.00 36.51
ATOM   1867  O   LEU  400      57.458  44.392  26.219  1.00 37.47
ATOM   1868  N   PHE  401      58.671  46.290  26.095  1.00 32.26
ATOM   1869  CA  PHE  401      59.899  45.682  26.596  1.00 35.15
ATOM   1870  CB  PHE  401      61.014  46.739  26.648  1.00 35.99
ATOM   1871  CG  PHE  401      62.346  46.213  27.117  1.00 39.41
ATOM   1872  CD1 PHE  401      62.845  45.003  26.639  1.00 35.94
ATOM   1873  CD2 PHE  401      63.119  46.944  28.019  1.00 40.55
ATOM   1874  CE1 PHE  401      64.088  44.531  27.055  1.00 30.16
ATOM   1875  CE2 PHE  401      64.367  46.478  28.439  1.00 35.53
ATOM   1876  CZ  PHE  401      64.849  45.271  27.952  1.00 36.39
ATOM   1877  C   PHE  401      59.607  45.129  27.996  1.00 36.42
ATOM   1878  O   PHE  401      59.957  43.995  28.317  1.00 36.71
ATOM   1879  N   LEU  402      58.920  45.925  28.805  1.00 36.59
ATOM   1880  CA  LEU  402      58.561  45.528  30.158  1.00 37.68
ATOM   1881  CB  LEU  402      57.986  46.720  30.917  1.00 40.71
ATOM   1882  CG  LEU  402      58.963  47.751  31.463  1.00 43.13
ATOM   1883  CD1 LEU  402      58.180  48.926  32.031  1.00 39.88
ATOM   1884  CD2 LEU  402      59.847  47.103  32.527  1.00 38.39
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ATOM	1885	C	LEU	402	57.521	44.420	30.164	1.00	38.02
ATOM	1886	O	LEU	402	57.582	43.507	30.984	1.00	37.39
ATOM	1887	N	GLU	403	56.558	44.522	29.251	1.00	39.74
ATOM	1888	CA	GLU	403	55.469	43.559	29.166	1.00	42.79
ATOM	1889	CB	GLU	403	54.445	44.022	28.129	1.00	46.21
ATOM	1890	CG	GLU	403	53.092	43.330	28.232	1.00	56.88
ATOM	1891	CD	GLU	403	52.090	43.833	27.202	1.00	65.21
ATOM	1892	OE1	GLU	403	52.230	44.983	26.728	1.00	70.60
ATOM	1893	OE2	GLU	403	51.154	43.073	26.870	1.00	70.53
ATOM	1894	C	GLU	403	55.890	42.121	28.886	1.00	40.14
ATOM	1895	O	GLU	403	55.368	41.200	29.506	1.00	40.57
ATOM	1896	N	VAL	404	56.835	41.932	27.966	1.00	39.43
ATOM	1897	CA	VAL	404	57.292	40.586	27.610	1.00	40.96
ATOM	1898	CB	VAL	404	57.851	40.516	26.159	1.00	35.50
ATOM	1899	CG1	VAL	404	56.807	40.995	25.177	1.00	43.46
ATOM	1900	CG2	VAL	404	59.132	41.321	26.030	1.00	25.74
ATOM	1901	C	VAL	404	58.317	39.946	28.536	1.00	41.94
ATOM	1902	O	VAL	404	58.468	38.722	28.533	1.00	43.82
ATOM	1903	N	PHE	405	59.026	40.759	29.310	1.00	39.84
ATOM	1904	CA	PHE	405	60.051	40.223	30.189	1.00	42.73
ATOM	1905	CB	PHE	405	61.401	40.897	29.913	1.00	36.85
ATOM	1906	CG	PHE	405	61.963	40.596	28.551	1.00	33.23
ATOM	1907	CD1	PHE	405	62.283	41.625	27.672	1.00	33.90
ATOM	1908	CD2	PHE	405	62.157	39.281	28.138	1.00	31.62
ATOM	1909	CE1	PHE	405	62.786	41.351	26.399	1.00	39.16
ATOM	1910	CE2	PHE	405	62.657	38.997	26.872	1.00	33.33
ATOM	1911	CZ	PHE	405	62.972	40.033	25.999	1.00	31.99
ATOM	1912	C	PHE	405	59.723	40.273	31.676	1.00	43.97
ATOM	1913	O	PHE	405	60.636	39.943	32.460	1.00	46.56
ATOM	1	O1	HOH	501	67.928	36.755	11.188	1.00	33.04
ATOM	2	O1	HOH	502	69.618	40.719	13.009	1.00	23.00
ATOM	3	O1	HOH	503	64.885	40.168	12.340	1.00	23.00
ATOM	4	O1	HOH	504	63.079	40.108	15.841	1.00	23.00
ATOM	5	O1	HOH	505	63.404	46.536	15.354	1.00	36.41
ATOM	6	O1	HOH	506	61.299	15.617	-0.595	1.00	23.00
ATOM	7	O1	HOH	507	67.359	15.375	0.551	1.00	23.00
ATOM	8	O1	HOH	508	67.230	12.002	-0.634	1.00	23.00
ATOM	9	O1	HOH	509	66.906	12.467	3.855	1.00	23.00
ATOM	10	O1	HOH	510	61.785	9.946	3.983	1.00	23.00
ATOM	11	O1	HOH	511	57.670	11.385	9.909	1.00	23.00
ATOM	12	O1	HOH	512	55.791	11.570	10.291	1.00	23.00
ATOM	13	O1	HOH	513	54.637	14.058	9.201	1.00	23.00
ATOM	14	O1	HOH	514	55.882	16.054	12.204	1.00	26.53
ATOM	15	O1	HOH	515	53.685	15.842	18.209	1.00	23.00
ATOM	16	O1	HOH	516	49.559	24.773	19.020	1.00	23.00
ATOM	17	O1	HOH	517	51.258	25.512	13.384	1.00	37.74
ATOM	18	O1	HOH	518	53.551	25.749	10.593	1.00	42.31

ATOM	19	O1	HOH	519	50.338	23.299	7.662	1.00	41.19
ATOM	20	O1	HOH	520	50.830	20.272	8.323	1.00	28.46
ATOM	21	O1	HOH	521	48.630	20.291	6.429	1.00	23.00
ATOM	22	O1	HOH	522	49.233	17.389	2.867	1.00	23.00
ATOM	23	O1	HOH	523	52.076	22.770	1.260	1.00	23.00
ATOM	24	O1	HOH	524	51.671	23.621	-1.020	1.00	23.00
ATOM	25	O1	HOH	525	58.294	31.509	2.147	1.00	31.83
ATOM	26	O1	HOH	526	57.497	36.071	2.268	1.00	23.00
ATOM	27	O1	HOH	527	65.373	36.025	6.809	1.00	23.00
ATOM	28	O1	HOH	528	67.871	36.399	6.419	1.00	66.52
ATOM	29	O1	HOH	529	67.189	33.811	9.409	1.00	23.00
ATOM	30	O1	HOH	530	62.458	48.056	13.590	1.00	23.00
ATOM	31	O1	HOH	531	63.943	46.824	10.638	1.00	39.26
ATOM	32	O1	HOH	532	57.465	45.867	13.186	1.00	23.00
ATOM	33	O1	HOH	533	55.223	40.774	10.959	1.00	23.00
ATOM	34	O1	HOH	534	53.737	44.032	19.560	1.00	23.00
ATOM	35	O1	HOH	535	55.982	49.757	24.168	1.00	23.00
ATOM	36	O1	HOH	536	58.575	52.330	31.881	1.00	23.00
ATOM	37	O1	HOH	537	62.563	49.327	37.804	1.00	23.00
ATOM	38	O1	HOH	538	61.736	40.280	35.059	1.00	60.53
ATOM	39	O1	HOH	539	63.271	38.155	34.156	1.00	52.21
ATOM	40	O1	HOH	540	61.872	35.187	29.990	1.00	23.00
ATOM	41	O1	HOH	541	63.701	36.808	28.720	1.00	23.00
ATOM	42	O1	HOH	542	62.255	35.864	26.425	1.00	26.69
ATOM	43	O1	HOH	543	63.567	33.453	25.308	1.00	44.90
ATOM	44	O1	HOH	544	65.456	30.135	27.713	1.00	23.00
ATOM	45	O1	HOH	545	61.997	26.566	24.157	1.00	23.00
ATOM	46	O1	HOH	546	61.422	22.231	24.358	1.00	23.00
ATOM	47	O1	HOH	547	59.636	21.462	25.378	1.00	23.00
ATOM	48	O1	HOH	548	64.860	21.210	22.578	1.00	23.00
ATOM	49	O1	HOH	549	63.316	14.964	15.508	1.00	52.55
ATOM	50	O1	HOH	550	62.770	10.707	15.710	1.00	48.78
ATOM	51	O1	HOH	551	61.579	9.665	12.081	1.00	23.00
ATOM	52	O1	HOH	552	65.916	11.929	11.639	1.00	23.00
ATOM	53	O1	HOH	553	68.086	12.882	11.226	1.00	23.00
ATOM	54	O1	HOH	554	69.504	11.968	14.083	1.00	23.00
ATOM	55	O1	HOH	555	72.311	15.121	10.552	1.00	23.00
ATOM	56	O1	HOH	556	74.716	15.172	10.253	1.00	23.00
ATOM	57	O1	HOH	557	73.109	17.916	7.451	1.00	23.00
ATOM	58	O1	HOH	558	71.316	15.446	7.652	1.00	23.00
ATOM	59	O1	HOH	559	74.717	14.555	5.957	1.00	23.00
ATOM	60	O1	HOH	560	73.523	22.311	2.467	1.00	23.00
ATOM	61	O1	HOH	561	76.491	23.094	5.700	1.00	51.34
ATOM	62	O1	HOH	562	73.961	29.841	10.035	1.00	33.87
ATOM	63	O1	HOH	563	76.164	33.031	11.370	1.00	23.00
ATOM	64	O1	HOH	564	77.193	34.039	9.712	1.00	37.14
ATOM	65	O1	HOH	565	76.525	41.395	10.460	1.00	23.00

ATOM	66	O1	HOH	566	79.358	49.535	15.048	1.00	53.78
ATOM	67	O1	HOH	567	78.046	53.530	9.188	1.00	23.00
ATOM	68	O1	HOH	568	68.058	52.158	15.548	1.00	23.00
ATOM	69	O1	HOH	569	68.598	53.164	18.083	1.00	45.72
ATOM	70	O1	HOH	570	73.482	58.914	21.552	1.00	58.99
ATOM	71	O1	HOH	571	65.648	53.551	26.240	1.00	23.00
ATOM	72	O1	HOH	572	75.776	46.207	30.367	1.00	33.32
ATOM	73	O1	HOH	573	78.686	46.470	31.087	1.00	23.00
ATOM	74	O1	HOH	574	77.580	41.209	31.884	1.00	23.00
ATOM	75	O1	HOH	575	76.879	31.531	24.067	1.00	23.00
ATOM	76	O1	HOH	576	77.927	29.163	20.647	1.00	23.00
ATOM	77	O1	HOH	577	80.180	24.963	17.233	1.00	53.36
ATOM	78	O1	HOH	578	80.631	25.802	15.508	1.00	23.00
ATOM	79	O1	HOH	579	82.104	22.566	14.156	1.00	23.00
ATOM	80	O1	HOH	580	76.954	22.077	18.425	1.00	46.50
ATOM	81	O1	HOH	581	86.619	37.903	16.945	1.00	47.66
ATOM	82	O1	HOH	582	83.586	42.305	18.576	1.00	23.00
ATOM	83	O1	HOH	583	83.481	45.262	19.526	1.00	23.00
ATOM	84	O1	HOH	584	66.787	32.864	33.796	1.00	23.00
ATOM	85	O1	HOH	585	59.447	33.572	30.734	1.00	23.00
ATOM	86	O1	HOH	586	57.013	32.278	31.125	1.00	23.00
ATOM	87	O1	HOH	587	58.084	29.428	24.648	1.00	24.06
ATOM	88	O1	HOH	588	52.774	25.054	32.650	1.00	57.81
ATOM	89	O1	HOH	589	53.800	24.465	34.834	1.00	23.00
ATOM	90	O1	HOH	590	47.195	30.205	30.414	1.00	23.00
ATOM	91	O1	HOH	591	48.978	35.051	30.228	1.00	23.00
ATOM	92	O1	HOH	592	49.280	39.962	31.041	1.00	23.00
ATOM	93	O1	HOH	593	42.329	32.230	20.993	1.00	23.00
ATOM	94	O1	HOH	594	44.199	32.910	19.088	1.00	23.00
ATOM	95	O1	HOH	595	41.542	27.336	19.178	1.00	23.00
ATOM	96	O1	HOH	596	48.971	31.296	14.022	1.00	23.00
ATOM	97	O1	HOH	597	50.180	31.092	7.307	1.00	23.00
ATOM	98	O1	HOH	598	64.465	28.209	3.208	1.00	45.35
ATOM	99	O1	HOH	599	67.740	26.910	1.986	1.00	23.00
ATOM	100	O1	HOH	600	67.958	31.203	3.532	1.00	23.00
ATOM	101	O1	HOH	601	68.885	22.721	0.234	1.00	39.53
ATOM	102	O1	HOH	602	46.735	20.335	25.877	1.00	44.92
ATOM	103	O1	HOH	603	47.359	19.644	28.494	1.00	41.57
ATOM	2300	C	ACY	701	52.555	39.909	24.622	1.00	48.75
ATOM	2301	O	ACY	701	52.351	40.361	25.771	1.00	48.92
ATOM	2302	OXT	ACY	701	53.503	39.156	24.279	1.00	50.69
ATOM	2303	CH3	ACY	701	51.543	40.314	23.527	1.00	41.32
ATOM	2304	C1	IBR	1	67.309	42.207	18.510	1.00	32.20
ATOM	2305	C2	IBR	1	68.795	43.194	23.237	1.00	29.59
ATOM	2306	C3	IBR	1	67.192	43.467	19.068	1.00	25.49
ATOM	2307	C4	IBR	1	69.096	44.270	24.011	1.00	25.67
ATOM	2308	C5	IBR	1	67.884	43.772	20.218	1.00	35.08

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ATOM   2309  C6  IBR   1    68.489  44.345  25.356  1.00 30.87
ATOM   2310  C7  IBR   1    68.673  42.828  20.790  1.00 30.76
ATOM   2311  C8  IBR   1    67.681  43.327  25.704  1.00 29.18
ATOM   2312  C9  IBR   1    68.811  41.580  20.269  1.00 32.19
ATOM   2313  C10 IBR   1    67.383  42.244  24.921  1.00 26.78
ATOM   2314  C11 IBR   1    68.122  41.241  19.099  1.00 25.50
ATOM   2315  C12 IBR   1    67.979  42.171  23.609  1.00 24.47
ATOM   2316  C13 IBR   1    66.529  41.932  17.285  1.00 17.69
ATOM   2317  C14 IBR   1    68.730  45.450  26.287  1.00 30.43
ATOM   2318  C15 IBR   1    67.011  40.785  16.271  1.00 21.37
ATOM   2319  C16 IBR   1    67.939  46.867  25.912  1.00 23.75
ATOM   2320  C17 IBR   1    65.946  40.598  15.151  1.00 23.91
ATOM   2321  C18 IBR   1    70.126  46.087  26.069  1.00 26.02
ATOM   2322  BR1 IBR   1    67.708  45.504  20.878  1.00 34.64
ATOM   2323  BR2 IBR   1    69.927  40.301  21.039  1.00 32.01
ATOM   2324  N1  IBR   1    68.284  40.938  15.821  1.00 18.75
ATOM   2325  O1  IBR   1    67.068  43.397  26.981  1.00 26.31
ATOM   2326  O2  IBR   1    69.393  43.153  21.933  1.00 30.15
ATOM   2327  O3  IBR   1    66.368  40.592  14.004  1.00 23.29
ATOM   2328  O4  IBR   1    64.786  40.511  15.515  1.00 23.47
END
END
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APPENDIX 6

TR_T3.PDB

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REMARK rTR_t3 full length numbering
REMARK
REMARK Rfactor 0.221 Rfree 0.240
REMARK Resolution 5. 2.0 all reflections
REMARK conformation of MET 388 confirmed by SA_omit map
REMARK
REMARK Three cacodylate-modified cysteines (CYA)
REMARK Cya334, Cya380, Cya392
REMARK cacodylate modeled as single arsenic atom
REMARK
REMARK side chain of certain residues modeled as ALA due to poor density;
REMARK however, residue name reflects true residue for clarity
REMARK
REMARK clone obtained from Murray et. al.
REMARK deposited sequence confirmed,
REMARK differing from that reported by Thompson et. al.
REMARK in the following codons:
REMARK 281 Thr - Ala
REMARK 285 Lys - Glu
REMARK identical to that reported by Mitsuhashi et. al.
REMARK gb:RNTRAVI X07409
JRNL        AUTH   M.B. MURRAY, N.D.ZILZ, N.L.MCCREARY,M.J.MACDONALD
JRNL        AUTH 2 H.C.TOWLE
JRNL        TITL   ISOLATION AND CHARACTERIZATION OF RAT CDNA CLONES
FOR TWO
JRNL        TITL 2 DISTINCT THYROID HORMONE RECPTORS
JRNL        REF    JBC              V. 263 25  1988
JRNL        AUTH   C.C.THOMPSON, C.WEINBERGER, R.LEBO, R.M.EVANS
JRNL        TITL   IDENTIFICATION OF A NOVEL THYROID HORMONE RECEPTOR
EXPRESSED
JRNL        TITL 2 IN THE MAMMALIAN CENTRAL NERVOUS SYSTEM
JRNL        REF    SCIENCE          V. 237     1987
JRNL        AUTH   T.MITSUHASHI,G.TENNYSON,V.NIKODEM
JRNL        TITL   NUCLEOTIDE SEQUENCE OF NOVEL CDNAS GENERATED BY
ALTERNATIVE
JRNL        TITL 2 SPLICING OF A RAT THYROID HORMONE RECEPTOR GENE
TRANSCRIPT
JRNL        REF    NUC. ACIDS. RES.      V. 16 12  1988
REMARK
ATOM     1 CB  ARG  157    68.406 10.620  7.027 1.00 41.66
ATOM     2 CG  ARG  157    69.926 10.540  6.997 1.00 44.48
ATOM     3 CD  ARG  157    70.552 11.261  8.173 1.00 47.02
ATOM     4 NE  ARG  157    70.112 10.680  9.435 1.00 49.73
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ATOM	5	CZ	ARG	157	70.917	10.392	10.450	1.00	51.21
ATOM	6	NH1	ARG	157	72.223	10.629	10.361	1.00	51.79
ATOM	7	NH2	ARG	157	70.405	9.871	11.556	1.00	51.92
ATOM	8	C	ARG	157	66.308	9.993	5.774	1.00	36.48
ATOM	9	O	ARG	157	66.047	10.318	4.622	1.00	38.84
ATOM	10	N	ARG	157	68.479	9.473	4.839	1.00	41.22
ATOM	11	CA	ARG	157	67.734	9.580	6.135	1.00	39.98
ATOM	12	N	PRO	158	65.366	9.953	6.728	1.00	33.85
ATOM	13	CD	PRO	158	65.494	9.553	8.139	1.00	34.72
ATOM	14	CA	PRO	158	63.981	10.336	6.407	1.00	31.89
ATOM	15	CB	PRO	158	63.219	10.015	7.694	1.00	31.87
ATOM	16	CG	PRO	158	64.260	10.158	8.759	1.00	33.55
ATOM	17	C	PRO	158	63.758	11.783	5.947	1.00	29.77
ATOM	18	O	PRO	158	64.221	12.739	6.575	1.00	27.93
ATOM	19	N	GLU	159	63.071	11.918	4.819	1.00	26.20
ATOM	20	CA	GLU	159	62.759	13.217	4.239	1.00	24.07
ATOM	21	CB	GLU	159	62.565	13.080	2.721	1.00	22.90
ATOM	22	CG	GLU	159	63.847	12.933	1.916	1.00	22.04
ATOM	23	CD	GLU	159	64.386	14.260	1.427	1.00	22.07
ATOM	24	OE1	GLU	159	63.577	15.175	1.203	1.00	24.63
ATOM	25	OE2	GLU	159	65.612	14.389	1.240	1.00	23.54
ATOM	26	C	GLU	159	61.463	13.717	4.855	1.00	21.56
ATOM	27	O	GLU	159	60.747	12.958	5.516	1.00	21.03
ATOM	28	N	PRO	160	61.176	15.022	4.713	1.00	19.69
ATOM	29	CD	PRO	160	61.997	16.139	4.207	1.00	16.57
ATOM	30	CA	PRO	160	59.923	15.500	5.292	1.00	18.12
ATOM	31	CB	PRO	160	59.935	16.990	4.955	1.00	15.65
ATOM	32	CG	PRO	160	61.390	17.328	4.905	1.00	14.83
ATOM	33	C	PRO	160	58.741	14.782	4.626	1.00	19.79
ATOM	34	O	PRO	160	58.793	14.431	3.445	1.00	20.20
ATOM	35	N	THR	161	57.713	14.497	5.412	1.00	20.15
ATOM	36	CA	THR	161	56.525	13.846	4.901	1.00	20.73
ATOM	37	CB	THR	161	55.672	13.274	6.060	1.00	20.77
ATOM	38	OG1	THR	161	55.195	14.348	6.881	1.00	21.74
ATOM	39	CG2	THR	161	56.489	12.324	6.917	1.00	19.52
ATOM	40	C	THR	161	55.724	14.954	4.219	1.00	21.64
ATOM	41	O	THR	161	56.010	16.139	4.421	1.00	23.13
ATOM	42	N	PRO	162	54.701	14.596	3.425	1.00	21.21
ATOM	43	CD	PRO	162	54.309	13.235	3.012	1.00	19.57
ATOM	44	CA	PRO	162	53.884	15.602	2.751	1.00	21.01
ATOM	45	CB	PRO	162	52.722	14.776	2.223	1.00	19.74
ATOM	46	CG	PRO	162	53.387	13.490	1.861	1.00	20.34
ATOM	47	C	PRO	162	53.391	16.643	3.753	1.00	22.52
ATOM	48	O	PRO	162	53.508	17.851	3.526	1.00	21.68
ATOM	49	N	GLU	163	52.880	16.151	4.878	1.00	23.01
ATOM	50	CA	GLU	163	52.349	16.996	5.941	1.00	25.97
ATOM	51	CB	GLU	163	51.672	16.148	7.022	1.00	29.50

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ATOM    52  CG  GLU   163     50.476  15.312   6.543  1.00 37.07
ATOM    53  CD  GLU   163     50.865  14.159   5.614  1.00 41.36
ATOM    54  OE1 GLU   163     51.937  13.544   5.828  1.00 40.11
ATOM    55  OE2 GLU   163     50.094  13.874   4.660  1.00 46.16
ATOM    56  C   GLU   163     53.415  17.879   6.581  1.00 24.92
ATOM    57  O   GLU   163     53.110  18.971   7.061  1.00 25.82
ATOM    58  N   GLU   164     54.661  17.412   6.600  1.00 22.87
ATOM    59  CA  GLU   164     55.724  18.209   7.187  1.00 21.46
ATOM    60  CB  GLU   164     56.880  17.340   7.664  1.00 21.23
ATOM    61  CG  GLU   164     56.509  16.508   8.886  1.00 20.30
ATOM    62  CD  GLU   164     57.557  15.483   9.243  1.00 20.07
ATOM    63  OE1 GLU   164     58.409  15.186   8.385  1.00 19.80
ATOM    64  OE2 GLU   164     57.532  14.977  10.385  1.00 21.00
ATOM    65  C   GLU   164     56.195  19.289   6.235  1.00 22.45
ATOM    66  O   GLU   164     56.607  20.354   6.684  1.00 23.36
ATOM    67  N   TRP   165     56.140  19.024   4.928  1.00 21.06
ATOM    68  CA  TRP   165     56.518  20.031   3.936  1.00 19.57
ATOM    69  CB  TRP   165     56.486  19.466   2.518  1.00 16.06
ATOM    70  CG  TRP   165     57.775  18.839   2.120  1.00 14.01
ATOM    71  CD2 TRP   165     59.055  19.480   2.037  1.00 13.26
ATOM    72  CE2 TRP   165     59.976  18.515   1.588  1.00 12.91
ATOM    73  CE3 TRP   165     59.507  20.779   2.300  1.00 14.44
ATOM    74  CD1 TRP   165     57.972  17.544   1.738  1.00 12.89
ATOM    75  NE1 TRP   165     59.290  17.343   1.413  1.00 12.80
ATOM    76  CZ2 TRP   165     61.328  18.805   1.388  1.00 15.06
ATOM    77  CZ3 TRP   165     60.850  21.069   2.103  1.00 14.72
ATOM    78  CH2 TRP   165     61.747  20.084   1.649  1.00 16.82
ATOM    79  C   TRP   165     55.553  21.210   4.056  1.00 18.93
ATOM    80  O   TRP   165     55.960  22.359   3.926  1.00 21.12
ATOM    81  N   ASP   166     54.279  20.922   4.307  1.00 19.33
ATOM    82  CA  ASP   166     53.262  21.963   4.483  1.00 20.35
ATOM    83  CB  ASP   166     51.864  21.353   4.672  1.00 20.22
ATOM    84  CG  ASP   166     51.302  20.748   3.386  1.00 23.36
ATOM    85  OD1 ASP   166     51.746  21.153   2.296  1.00 23.42
ATOM    86  OD2 ASP   166     50.414  19.878   3.462  1.00 21.02
ATOM    87  C   ASP   166     53.623  22.785   5.712  1.00 21.02
ATOM    88  O   ASP   166     53.627  24.013   5.654  1.00 22.56
ATOM    89  N   LEU   167     53.926  22.096   6.813  1.00 20.50
ATOM    90  CA  LEU   167     54.312  22.726   8.071  1.00 21.37
ATOM    91  CB  LEU   167     54.661  21.657   9.109  1.00 23.49
ATOM    92  CG  LEU   167     54.223  21.846  10.565  1.00 27.19
ATOM    93  CD1 LEU   167     55.312  21.291  11.453  1.00 27.70
ATOM    94  CD2 LEU   167     53.940  23.314  10.906  1.00 27.71
ATOM    95  C   LEU   167     55.541  23.602   7.839  1.00 20.72
ATOM    96  O   LEU   167     55.601  24.748   8.294  1.00 22.98
ATOM    97  N   ILE   168     56.505  23.051   7.114  1.00 18.54
ATOM    98  CA  ILE   168     57.747  23.725   6.778  1.00 18.60
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ATOM	99	CB	ILE	168	58.671	22.771	5.995	1.00	17.54
ATOM	100	CG2	ILE	168	59.695	23.533	5.163	1.00	17.65
ATOM	101	CG1	ILE	168	59.330	21.794	6.972	1.00	20.27
ATOM	102	CD1	ILE	168	60.048	20.631	6.322	1.00	17.96
ATOM	103	C	ILE	168	57.486	25.002	5.979	1.00	21.96
ATOM	104	O·	ILE	168	58.045	26.064	6.291	1.00	23.06
ATOM	105	N	HIS	169	56.591	24.925	4.996	1.00	22.04
ATOM	106	CA	HIS	169	56.285	26.092	4.164	1.00	21.21
ATOM	107	CB	HIS	169	55.413	25.702	2.969	1.00	20.12
ATOM	108	CG	HIS	169	56.101	24.799	2.001	1.00	19.18
ATOM	109	CD2	HIS	169	57.398	24.733	1.619	1.00	18.62
ATOM	110	ND1	HIS	169	55.457	23.764	1.357	1.00	17.90
ATOM	111	CE1	HIS	169	56.327	23.096	0.625	1.00	18.43
ATOM	112	NE2	HIS	169	57.513	23.660	0.772	1.00	20.10
ATOM	113	C	HIS	169	55.615	27.198	4.959	1.00	20.61
ATOM	114	O	HIS	169	55.979	28.370	4.836	1.00	20.08
ATOM	115	N	VAL	170	54.632	26.821	5.769	1.00	20.01
ATOM	116	CA	VAL	170	53.922	27.785	6.580	1.00	20.52
ATOM	117	CB	VAL	170	52.816	27.120	7.384	1.00	21.33
ATOM	118	CG1	VAL	170	52.224	28.113	8.366	1.00	22.32
ATOM	119	CG2	VAL	170	51.740	26.608	6.438	1.00	23.27
ATOM	120	C	VAL	170	54.891	28.477	7.521	1.00	20.58
ATOM	121	O	VAL	170	54.926	29.704	7.554	1.00	22.32
ATOM	122	N	ALA	171	55.712	27.696	8.230	1.00	18.83
ATOM	123	CA	ALA	171	56.692	28.234	9.182	1.00	18.34
ATOM	124	CB	ALA	171	57.375	27.102	9.946	1.00	17.05
ATOM	125	C	ALA	171	57.733	29.151	8.533	1.00	17.84
ATOM	126	O	ALA	171	58.084	30.200	9.091	1.00	18.67
ATOM	127	N	THR	172	58.231	28.756	7.367	1.00	17.81
ATOM	128	CA	THR	172	59.215	29.551	6.639	1.00	18.88
ATOM	129	CB	THR	172	59.726	28.794	5.380	1.00	20.47
ATOM	130	OG1	THR	172	60.280	27.531	5.776	1.00	21.38
ATOM	131	CG2	THR	172	60.806	29.599	4.648	1.00	20.22
ATOM	132	C	THR	172	58.655	30.932	6.251	1.00	19.42
ATOM	133	O	THR	172	59.320	31.957	6.435	1.00	17.98
ATOM	134	N	GLU	173	57.425	30.970	5.756	1.00	19.97
ATOM	135	CA	GLU	173	56.811	32.236	5.374	1.00	22.51
ATOM	136	CB	GLU	173	55.520	31.981	4.577	1.00	27.26
ATOM	137	CG	GLU	173	54.823	33.244	4.005	1.00	34.96
ATOM	138	CD	GLU	173	55.690	34.040	3.020	1.00	39.54
ATOM	139	OE1	GLU	173	56.610	33.454	2.395	1.00	41.82
ATOM	140	OE2	GLU	173	55.443	35.259	2.872	1.00	41.06
ATOM	141	C	GLU	173	56.538	33.099	6.622	1.00	21.60
ATOM	142	O	GLU	173	56.726	34.313	6.595	1.00	21.73
ATOM	143	N	ALA	174	56.123	32.461	7.716	1.00	19.69
ATOM	144	CA	ALA	174	55.844	33.155	8.968	1.00	18.07
ATOM	145	CB	ALA	174	55.423	32.169	10.037	1.00	16.90

ATOM	146	C	ALA	174	57.101	33.883	9.400	1.00	17.65
ATOM	147	O	ALA	174	57.052	35.031	9.829	1.00	19.80
ATOM	148	N	HIS	175	58.240	33.222	9.259	1.00	16.39
ATOM	149	CA	HIS	175	59.498	33.831	9.629	1.00	16.41
ATOM	150	CB	HIS	175	60.574	32.758	9.804	1.00	12.71
ATOM	151	CG	HIS	175	61.938	33.318	10.043	1.00	11.09
ATOM	152	CD2	HIS	175	62.373	34.252	10.920	1.00	8.26
ATOM	153	ND1	HIS	175	63.030	32.977	9.273	1.00	13.39
ATOM	154	CE1	HIS	175	64.076	33.683	9.658	1.00	13.77
ATOM	155	NE2	HIS	175	63.702	34.464	10.658	1.00	12.70
ATOM	156	C	HIS	175	59.959	34.903	8.624	1.00	19.55
ATOM	157	O	HIS	175	60.293	36.027	9.016	1.00	18.38
ATOM	158	N	ARG	176	59.987	34.555	7.339	1.00	20.77
ATOM	159	CA	ARG	176	60.424	35.494	6.307	1.00	21.30
ATOM	160	CB	ARG	176	60.315	34.876	4.917	1.00	24.87
ATOM	161	CG	ARG	176	61.361	33.827	4.609	1.00	30.22
ATOM	162	CD	ARG	176	61.429	33.603	3.116	1.00	36.29
ATOM	163	NE	ARG	176	62.256	32.457	2.758	1.00	44.72
ATOM	164	CZ	ARG	176	62.031	31.680	1.700	1.00	49.80
ATOM	165	NH1	ARG	176	61.000	31.935	0.894	1.00	50.83
ATOM	166	NH2	ARG	176	62.812	30.627	1.466	1.00	50.14
ATOM	167	C	ARG	176	59.658	36.807	6.337	1.00	20.67
ATOM	168	O	ARG	176	60.256	37.877	6.238	1.00	20.53
ATOM	169	N	SER	177	58.344	36.730	6.508	1.00	20.67
ATOM	170	CA	SER	177	57.526	37.934	6.551	1.00	21.86
ATOM	171	CB	SER	177	56.061	37.588	6.298	1.00	19.59
ATOM	172	OG	SER	177	55.541	36.774	7.329	1.00	21.85
ATOM	173	C	SER	177	57.659	38.733	7.857	1.00	23.27
ATOM	174	O	SER	177	57.073	39.807	7.989	1.00	24.40
ATOM	175	N	THR	178	58.383	38.202	8.837	1.00	22.16
ATOM	176	CA	THR	178	58.542	38.913	10.095	1.00	20.62
ATOM	177	CB	THR	178	57.853	38.162	11.265	1.00	19.93
ATOM	178	OG1	THR	178	58.386	36.838	11.381	1.00	18.72
ATOM	179	CG2	THR	178	56.359	38.057	11.033	1.00	16.95
ATOM	180	C	THR	178	60.015	39.137	10.394	1.00	21.57
ATOM	181	O	THR	178	60.368	39.649	11.449	1.00	23.91
ATOM	182	N	ASN	179	60.870	38.769	9.445	1.00	22.22
ATOM	183	CA	ASN	179	62.316	38.912	9.585	1.00	24.22
ATOM	184	CB	ASN	179	63.013	37.690	8.970	1.00	22.49
ATOM	185	CG	ASN	179	64.480	37.596	9.344	1.00	23.53
ATOM	186	OD1	ASN	179	64.866	37.912	10.464	1.00	22.32
ATOM	187	ND2	ASN	179	65.296	37.100	8.425	1.00	23.84
ATOM	188	C	ASN	179	62.744	40.210	8.881	1.00	26.52
ATOM	189	O	ASN	179	62.923	40.253	7.657	1.00	26.65
ATOM	190	N	ALA	180	62.898	41.267	9.671	1.00	27.47
ATOM	191	CA	ALA	180	63.255	42.582	9.166	1.00	30.30
ATOM	192	CB	ALA	180	63.552	43.508	10.321	1.00	27.21

ATOM	193	C	ALA	180	64.404	42.593	8.166	1.00	33.14	
ATOM	194	O	ALA	180	65.440	41.972	8.397	1.00	33.71	
ATOM	195	N	GLN	181	64.209	43.295	7.049	0.50	35.09	ALTA
ATOM	196	CA	GLN	181	65.212	43.423	5.980	0.50	37.44	ALTA
ATOM	197	CB	GLN	181	66.544	43.974	6.511	0.50	38.60	ALTA
ATOM	198	CG	GLN	181	66.728	45.462	6.299	0.50	40.53	ALTA
ATOM	199	CD	GLN	181	65.805	46.291	7.162	0.50	42.72	ALTA
ATOM	200	OE1	GLN	181	64.639	46.512	6.828	0.50	42.05	ALTA
ATOM	201	NE2	GLN	181	66.324	46.756	8.284	0.50	44.59	ALTA
ATOM	202	C	GLN	181	65.481	42.180	5.138	0.50	38.43	ALTA
ATOM	203	O	GLN	181	66.175	42.262	4.118	0.50	38.92	ALTA
ATOM	204	N	GLY	182	64.958	41.034	5.562	1.00	38.74	
ATOM	205	CA	GLY	182	65.166	39.808	4.805	1.00	40.07	
ATOM	206	C	GLY	182	66.634	39.554	4.486	1.00	42.06	
ATOM	207	O	GLY	182	67.504	39.684	5.346	1.00	43.28	
ATOM	208	N	SER	183	66.926	39.272	3.224	1.00	43.72	
ATOM	209	CA	SER	183	68.299	39.001	2.812	1.00	45.88	
ATOM	210	CB	SER	183	68.304	38.069	1.593	1.00	47.26	
ATOM	211	OG	SER	183	67.519	38.605	0.531	1.00	47.23	
ATOM	212	C	SER	183	69.095	40.268	2.497	1.00	46.24	
ATOM	213	O	SER	183	70.290	40.194	2.185	1.00	48.13	
ATOM	214	N	HIS	184	68.445	41.426	2.579	1.00	45.79	
ATOM	215	CA	HIS	184	69.111	42.690	2.276	1.00	45.00	
ATOM	216	CB	HIS	184	68.127	43.636	1.594	1.00	43.54	
ATOM	217	C	HIS	184	69.732	43.351	3.516	1.00	44.67	
ATOM	218	O	HIS	184	70.316	44.440	3.428	1.00	45.02	
ATOM	219	N	TRP	185	69.659	42.663	4.653	1.00	43.24	
ATOM	220	CA	TRP	185	70.190	43.172	5.919	1.00	40.98	
ATOM	221	CB	TRP	185	70.078	42.106	7.020	1.00	37.96	
ATOM	222	CG	TRP	185	70.889	40.874	6.775	1.00	34.14	
ATOM	223	CD2	TRP	185	72.197	40.593	7.291	1.00	33.38	
ATOM	224	CE2	TRP	185	72.572	39.321	6.807	1.00	31.68	
ATOM	225	CE3	TRP	185	73.092	41.296	8.107	1.00	31.65	
ATOM	226	CD1	TRP	185	70.530	39.790	6.028	1.00	34.27	
ATOM	227	NE1	TRP	185	71.536	38.852	6.043	1.00	33.51	
ATOM	228	CZ2	TRP	185	73.795	38.733	7.121	1.00	31.67	
ATOM	229	CZ3	TRP	185	74.308	40.713	8.419	1.00	31.29	
ATOM	230	CH2	TRP	185	74.651	39.444	7.923	1.00	31.06	
ATOM	231	C	TRP	185	71.618	43.720	5.856	1.00	41.52	
ATOM	232	O	TRP	185	71.893	44.817	6.335	1.00	40.52	
ATOM	233	N	LYS	186	72.520	42.976	5.234	1.00	42.94	
ATOM	234	CA	LYS	186	73.896	43.417	5.143	1.00	45.25	
ATOM	235	CB	LYS	186	74.764	42.328	4.508	1.00	45.96	
ATOM	236	CG	LYS	186	76.255	42.600	4.590	1.00	48.07	
ATOM	237	CD	LYS	186	77.053	41.307	4.504	1.00	51.20	
ATOM	238	CE	LYS	186	78.554	41.574	4.457	1.00	52.69	
ATOM	239	NZ	LYS	186	78.975	42.277	3.201	1.00	55.56	

ATOM	240	C	LYS	186	74.025	44.730	4.377	1.00	47.38	
ATOM	241	O	LYS	186	74.914	45.535	4.663	1.00	47.65	
ATOM	242	N	GLN	187	73.134	44.959	3.418	0.50	48.02	ALTA
ATOM	243	CA	GLN	187	73.193	46.183	2.623	0.50	48.69	ALTA
ATOM	244	CB	GLN	187	72.547	45.973	1.246	0.50	48.66	ALTA
ATOM	245	CG	GLN	187	73.104	44.771	0.453	0.50	49.05	ALTA
ATOM	246	CD	GLN	187	74.624	44.766	0.339	0.50	49.17	ALTA
ATOM	247	OE1	GLN	187	75.225	45.691	-0.209	0.50	49.71	ALTA
ATOM	248	NE2	GLN	187	75.250	43.710	0.847	0.50	48.57	ALTA
ATOM	249	C	GLN	187	72.551	47.373	3.343	0.50	49.06	ALTA
ATOM	250	O	GLN	187	73.094	48.475	3.329	0.50	49.53	ALTA
ATOM	251	N	ARG	188	71.405	47.152	3.980	1.00	49.18	
ATOM	252	CA	ARG	188	70.723	48.221	4.695	1.00	49.90	
ATOM	253	CB	ARG	188	69.209	47.988	4.653	1.00	53.68	
ATOM	254	CG	ARG	188	68.617	47.798	3.251	1.00	57.22	
ATOM	255	CD	ARG	188	67.099	47.962	3.302	1.00	60.67	
ATOM	256	NE	ARG	188	66.430	47.441	2.110	1.00	64.43	
ATOM	257	CZ	ARG	188	65.931	46.208	2.009	1.00	66.13	
ATOM	258	NH1	ARG	188	66.027	45.362	3.031	1.00	66.69	
ATOM	259	NH2	ARG	188	65.318	45.823	0.893	1.00	66.10	
ATOM	260	C	ARG	188	71.150	48.510	6.133	1.00	48.42	
ATOM	261	O	ARG	188	70.544	49.368	6.784	1.00	48.86	
ATOM	262	N	ARG	189	72.153	47.804	6.647	1.00	46.00	
ATOM	263	CA	ARG	189	72.581	48.030	8.028	1.00	44.24	
ATOM	264	CB	ARG	189	73.039	46.726	8.690	1.00	43.40	
ATOM	265	CG	ARG	189	74.367	46.204	8.203	1.00	43.05	
ATOM	266	CD	ARG	189	74.808	45.021	9.019	1.00	43.62	
ATOM	267	NE	ARG	189	76.185	44.660	8.717	1.00	45.95	
ATOM	268	CZ	ARG	189	76.981	43.976	9.536	1.00	48.56	
ATOM	269	NH1	ARG	189	76.548	43.560	10.724	1.00	46.34	
ATOM	270	NH2	ARG	189	78.233	43.735	9.174	1.00	50.12	
ATOM	271	C	ARG	189	73.642	49.116	8.238	1.00	43.20	
ATOM	272	O	ARG	189	74.629	49.210	7.500	1.00	43.07	
ATOM	273	N	LYS	190	73.427	49.925	9.268	1.00	41.56	
ATOM	274	CA	LYS	190	74.335	51.003	9.628	1.00	39.96	
ATOM	275	CB	LYS	190	73.563	52.323	9.757	1.00	38.85	
ATOM	276	C	LYS	190	74.983	50.631	10.956	1.00	38.91	
ATOM	277	O	LYS	190	74.345	50.015	11.806	1.00	38.17	
ATOM	278	N	PHE	191	76.261	50.959	11.104	1.00	38.49	
ATOM	279	CA	PHE	191	76.998	50.673	12.326	1.00	38.42	
ATOM	280	CB	PHE	191	78.500	50.762	12.073	1.00	38.37	
ATOM	281	CG	PHE	191	79.056	49.608	11.308	1.00	39.05	
ATOM	282	CD1	PHE	191	78.712	49.408	9.976	1.00	40.02	
ATOM	283	CD2	PHE	191	79.942	48.727	11.917	1.00	39.19	
ATOM	284	CE1	PHE	191	79.245	48.344	9.256	1.00	40.57	
ATOM	285	CE2	PHE	191	80.482	47.661	11.213	1.00	40.32	
ATOM	286	CZ	PHE	191	80.133	47.466	9.875	1.00	41.84	

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ATOM    287  C   PHE   191      76.650  51.673  13.416  1.00 37.96
ATOM    288  O   PHE   191      76.568  52.872  13.151  1.00 38.95
ATOM    289  N   LEU   192      76.433  51.184  14.634  1.00 37.05
ATOM    290  CA  LEU   192      76.138  52.063  15.759  1.00 35.99
ATOM    291  CB  LEU   192      75.833  51.247  17.014  1.00 33.04
ATOM    292  CG  LEU   192      75.503  52.074  18.260  1.00 31.38
ATOM    293  CD1 LEU   192      74.116  52.651  18.102  1.00 29.02
ATOM    294  CD2 LEU   192      75.592  51.229  19.536  1.00 30.32
ATOM    295  C   LEU   192      77.436  52.831  15.976  1.00 36.99
ATOM    296  O   LEU   192      78.500  52.218  16.112  1.00 37.66
ATOM    297  N   PRO   193      77.377  54.177  15.988  1.00 38.15
ATOM    298  CD  PRO   193      76.156  54.996  15.902  1.00 37.90
ATOM    299  CA  PRO   193      78.561  55.025  16.187  1.00 38.68
ATOM    300  CB  PRO   193      77.950  56.365  16.568  1.00 37.20
ATOM    301  CG  PRO   193      76.711  56.397  15.758  1.00 37.08
ATOM    302  C   PRO   193      79.475  54.503  17.294  1.00 41.12
ATOM    303  O   PRO   193      79.005  54.129  18.367  1.00 42.26
ATOM    304  N   ASP   194      80.782  54.509  17.052  1.00 43.62
ATOM    305  CA  ASP   194      81.731  54.012  18.050  1.00 46.71
ATOM    306  CB  ASP   194      83.131  53.938  17.470  1.00 49.32
ATOM    307  CG  ASP   194      83.237  52.904  16.397  1.00 52.34
ATOM    308  OD1 ASP   194      83.539  51.726  16.719  1.00 53.18
ATOM    309  OD2 ASP   194      82.981  53.268  15.227  1.00 55.10
ATOM    310  C   ASP   194      81.769  54.743  19.386  1.00 47.12
ATOM    311  O   ASP   194      82.158  54.163  20.403  1.00 48.16
ATOM    312  N   ASP   195      81.389  56.015  19.386  1.00 47.54
ATOM    313  CA  ASP   195      81.382  56.791  20.620  1.00 48.68
ATOM    314  CB  ASP   195      81.180  58.285  20.322  1.00 50.76
ATOM    315  CG  ASP   195      79.871  58.572  19.602  1.00 54.24
ATOM    316  OD1 ASP   195      78.929  59.082  20.253  1.00 56.17
ATOM    317  OD2 ASP   195      79.786  58.292  18.385  1.00 56.08
ATOM    318  C   ASP   195      80.304  56.274  21.580  1.00 47.63
ATOM    319  O   ASP   195      80.294  56.621  22.772  1.00 49.07
ATOM    320  N   ILE   196      79.400  55.444  21.065  1.00 44.87
ATOM    321  CA  ILE   196      78.330  54.890  21.888  1.00 42.53
ATOM    322  CB  ILE   196      76.983  54.813  21.121  1.00 42.19
ATOM    323  CG2 ILE   196      75.870  54.357  22.060  1.00 40.29
ATOM    324  CG1 ILE   196      76.635  56.191  20.535  1.00 41.32
ATOM    325  CD1 ILE   196      75.344  56.219  19.732  1.00 41.32
ATOM    326  C   ILE   196      78.725  53.509  22.391  1.00 40.89
ATOM    327  O   ILE   196      79.358  52.722  21.679  1.00 40.08
ATOM    328  N   GLY   197      78.384  53.240  23.642  1.00 40.16
ATOM    329  CA  GLY   197      78.705  51.957  24.228  1.00 40.21
ATOM    330  C   GLY   197      80.066  51.907  24.879  1.00 40.18
ATOM    331  O   GLY   197      80.512  50.839  25.267  1.00 40.55
ATOM    332  N   GLN   198      80.718  53.057  25.029  1.00 41.25
ATOM    333  CA  GLN   198      82.038  53.111  25.664  1.00 40.94
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ATOM    334  CB  GLN    198      83.041  53.823  24.738  1.00 39.51
ATOM    335  C   GLN    198      81.995  53.796  27.046  1.00 40.93
ATOM    336  O   GLN    198      83.036  54.197  27.571  1.00 41.83
ATOM    337  N   SER    199      80.806  53.859  27.654  1.00 39.68
ATOM    338  CA  SER    199      80.615  54.510  28.961  1.00 37.74
ATOM    339  CB  SER    199      79.995  55.905  28.768  1.00 38.50
ATOM    340  OG  SER    199      80.687  56.672  27.792  1.00 40.71
ATOM    341  C   SER    199      79.743  53.726  29.958  1.00 36.31
ATOM    342  O   SER    199      78.719  54.228  30.436  1.00 35.69
ATOM    343  N   PRO    200      80.123  52.484  30.280  1.00 35.05
ATOM    344  CD  PRO    200      81.246  51.684  29.760  1.00 33.97
ATOM    345  CA  PRO    200      79.313  51.715  31.228  1.00 35.89
ATOM    346  CB  PRO    200      79.872  50.304  31.075  1.00 33.94
ATOM    347  CG  PRO    200      81.297  50.532  30.708  1.00 33.31
ATOM    348  C   PRO    200      79.477  52.241  32.656  1.00 37.75
ATOM    349  O   PRO    200      80.484  51.959  33.299  1.00 38.78
ATOM    350  N   ILE    201      78.493  52.988  33.158  1.00 39.61
ATOM    351  CA  ILE    201      78.590  53.551  34.511  1.00 40.56
ATOM    352  CB  ILE    201      78.715  55.093  34.484  1.00 40.20
ATOM    353  CG2 ILE    201      80.125  55.501  34.082  1.00 41.06
ATOM    354  CG1 ILE    201      77.690  55.694  33.532  1.00 40.98
ATOM    355  CD1 ILE    201      77.969  57.147  33.205  1.00 44.31
ATOM    356  C   ILE    201      77.535  53.160  35.546  1.00 41.40
ATOM    357  O   ILE    201      77.768  53.313  36.751  1.00 42.09
ATOM    358  N   VAL    202      76.365  52.701  35.104  1.00 41.42
ATOM    359  CA  VAL    202      75.325  52.293  36.053  1.00 40.70
ATOM    360  CB  VAL    202      73.913  52.292  35.422  1.00 38.44
ATOM    361  CG1 VAL    202      72.881  51.826  36.435  1.00 35.91
ATOM    362  CG2 VAL    202      73.560  53.692  34.934  1.00 36.42
ATOM    363  C   VAL    202      75.687  50.917  36.622  1.00 41.64
ATOM    364  O   VAL    202      76.094  50.008  35.894  1.00 42.05
ATOM    365  N   SER    203      75.596  50.800  37.938  1.00 43.06
ATOM    366  CA  SER    203      75.947  49.576  38.639  1.00 44.57
ATOM    367  CB  SER    203      75.916  49.842  40.154  1.00 46.82
ATOM    368  OG  SER    203      76.457  48.772  40.916  1.00 50.18
ATOM    369  C   SER    203      75.052  48.388  38.294  1.00 44.08
ATOM    370  O   SER    203      73.849  48.534  38.093  1.00 44.28
ATOM    371  N   MET    204      75.656  47.210  38.231  1.00 43.11
ATOM    372  CA  MET    204      74.930  45.980  37.963  1.00 43.12
ATOM    373  CB  MET    204      75.048  45.557  36.494  1.00 41.07
ATOM    374  CG  MET    204      74.126  46.320  35.554  1.00 36.96
ATOM    375  SD  MET    204      72.375  46.134  35.990  1.00 38.66
ATOM    376  CE  MET    204      71.970  44.592  35.098  1.00 37.26
ATOM    377  C   MET    204      75.561  44.943  38.866  1.00 43.68
ATOM    378  O   MET    204      76.784  44.817  38.912  1.00 44.32
ATOM    379  N   PRO    205      74.735  44.204  39.619  1.00 44.22
ATOM    380  CD  PRO    205      73.261  44.310  39.610  1.00 44.44
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ATOM   381  CA  PRO   205      75.187  43.164  40.546  1.00 44.32
ATOM   382  CB  PRO   205      73.944  42.299  40.701  1.00 45.18
ATOM   383  CG  PRO   205      72.832  43.335  40.691  1.00 44.29
ATOM   384  C   PRO   205      76.417  42.354  40.122  1.00 44.31
ATOM   385  O   PRO   205      77.393  42.293  40.864  1.00 43.97
ATOM   386  N⁻  ASP   206      76.404  41.802  38.912  1.00 44.30
ATOM   387  CA  ASP   206     .77.524  40.984  38.433  1.00 44.77
ATOM   388  CB  ASP   206      77.073  40.106  37.270  1.00 47.12
ATOM   389  CG  ASP   206      76.503  40.912  36.120  1.00 49.73
ATOM   390  OD1 ASP   206      76.992  42.039  35.863  1.00 49.65
ATOM   391  OD2 ASP   206      75.553  40.416  35.478  1.00 51.96
ATOM   392  C   ASP   206      78.805  41.718  38.037  1.00 44.10
ATOM   393  O   ASP   206      79.754  41.099  37.549  1.00 43.60
ATOM   394  N   GLY   207      78.804  43.039  38.145  1.00 44.19
ATOM   395  CA  GLY   207      80.001  43.785  37.803  1.00 43.51
ATOM   396  C   GLY   207      80.041  44.425  36.433  1.00 43.29
ATOM   397  O   GLY   207      80.745  45.421  36.257  1.00 44.47
ATOM   398  N   ASP   208      79.363  43.845  35.446  1.00 42.45
ATOM   399  CA  ASP   208      79.347  44.436  34.106  1.00 41.51
ATOM   400  CB  ASP   208      78.915  43.402  33.070  1.00 42.91
ATOM   401  CG  ASP   208      80.001  42.379  32.785  1.00 43.57
ATOM   402  OD1 ASP   208      79.675  41.218  32.468  1.00 44.55
ATOM   403  OD2 ASP   208      81.191  42.742  32.868  1.00 47.14
ATOM   404  C   ASP   208      78.378  45.606  34.143  1.00 40.78
ATOM   405  O   ASP   208      77.176  45.403  34.277  1.00 42.50
ATOM   406  N   LYS   209      78.902  46.827  34.058  1.00 39.10
ATOM   407  CA  LYS   209      78.071  48.033  34.150  1.00 37.23
ATOM   408  CB  LYS   209      78.910  49.211  34.681  1.00 37.29
ATOM   409  C   LYS   209      77.326  48.423  32.871  1.00 34.47
ATOM   410  O   LYS   209      77.707  48.013  31.776  1.00 33.85
ATOM   411  N   VAL   210      76.275  49.228  33.028  1.00 33.30
ATOM   412  CA  VAL   210      75.448  49.684  31.907  1.00 31.78
ATOM   413  CB  VAL   210      73.929  49.618  32.235  1.00 29.51
ATOM   414  CG1 VAL   210      73.102  50.012  31.010  1.00 29.24
ATOM   415  CG2 VAL   210      73.541  48.237  32.698  1.00 29.84
ATOM   416  C   VAL   210      75.731  51.115  31.451  1.00 32.68
ATOM   417  O   VAL   210      75.845  52.033  32.264  1.00 32.69
ATOM   418  N   ASP   211      75.769  51.290  30.134  1.00 33.00
ATOM   419  CA  ASP   211      75.978  52.574  29.476  1.00 31.85
ATOM   420  CB  ASP   211      76.826  52.353  28.221  1.00 32.38
ATOM   421  CG  ASP   211      77.019  53.612  27.386  1.00 31.88
ATOM   422  OD1 ASP   211      78.123  53.768  26.843  1.00 32.78
ATOM   423  OD2 ASP   211      76.079  54.412  27.208  1.00 32.32
ATOM   424  C   ASP   211      74.562  53.023  29.101  1.00 33.39
ATOM   425  O   ASP   211      73.925  52.444  28.206  1.00 31.94
ATOM   426  N   LEU   212      74.078  54.063  29.770  1.00 32.50
ATOM   427  CA  LEU   212      72.731  54.568  29.532  1.00 32.29
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ATOM	428	CB	LEU	212	72.440	55.736	30.470	1.00	32.41
ATOM	429	CG	LEU	212	72.311	55.336	31.936	1.00	32.11
ATOM	430	CD1	LEU	212	72.447	56.555	32.830	1.00	32.35
ATOM	431	CD2	LEU	212	70.979	54.650	32.148	1.00	30.87
ATOM	432	C	LEU	212	72.419	54.962	28.092	1.00	32.29
ATOM	433	O-	LEU	212	71.326	54.695	27.609	1.00	32.13
ATOM	434	N	GLU	213	73.370	55.589	27.407	1.00	32.21
ATOM	435	CA	GLU	213	73.144	56.007	26.028	1.00	33.12
ATOM	436	CB	GLU	213	74.305	56.864	25.530	1.00	36.72
ATOM	437	CG	GLU	213	74.067	57.468	24.146	1.00	40.61
ATOM	438	CD	GLU	213	75.316	58.101	23.545	1.00	44.21
ATOM	439	OE1	GLU	213	76.434	57.851	24.059	1.00	46.23
ATOM	440	OE2	GLU	213	75.178	58.836	22.543	1.00	45.81
ATOM	441	C	GLU	213	72.966	54.801	25.111	1.00	31.91
ATOM	442	O	GLU	213	72.064	54.775	24.273	1.00	31.31
ATOM	443	N	ALA	214	73.827	53.803	25.285	1.00	30.66
ATOM	444	CA	ALA	214	73.769	52.585	24.482	1.00	30.43
ATOM	445	CB	ALA	214	74.971	51.690	24.783	1.00	29.77
ATOM	446	C	ALA	214	72.464	51.854	24.778	1.00	29.34
ATOM	447	O	ALA	214	71.772	51.421	23.862	1.00	28.33
ATOM	448	N	PHE	215	72.116	51.762	26.058	1.00	28.45
ATOM	449	CA	PHE	215	70.882	51.116	26.492	1.00	29.05
ATOM	450	CB	PHE	215	70.732	51.240	28.005	1.00	25.98
ATOM	451	CG	PHE	215	69.443	50.689	28.535	1.00	25.53
ATOM	452	CD1	PHE	215	69.330	49.344	28.854	1.00	26.16
ATOM	453	CD2	PHE	215	68.349	51.519	28.737	1.00	25.04
ATOM	454	CE1	PHE	215	68.144	48.831	29.370	1.00	25.73
ATOM	455	CE2	PHE	215	67.160	51.018	29.252	1.00	25.84
ATOM	456	CZ	PHE	215	67.058	49.669	29.570	1.00	25.25
ATOM	457	C	PHE	215	69.694	51.780	25.801	1.00	30.92
ATOM	458	O	PHE	215	68.773	51.107	25.316	1.00	30.38
ATOM	459	N	SER	216	69.714	53.108	25.776	1.00	31.41
ATOM	460	CA	SER	216	68.667	53.887	25.136	1.00	31.23
ATOM	461	CB	SER	216	68.976	55.375	25.256	1.00	32.50
ATOM	462	OG	SER	216	67.972	56.153	24.628	1.00	35.83
ATOM	463	C	SER	216	68.600	53.504	23.663	1.00	31.67
ATOM	464	O	SER	216	67.527	53.235	23.129	1.00	31.34
ATOM	465	N	GLU	217	69.756	53.475	23.014	1.00	31.72
ATOM	466	CA	GLU	217	69.823	53.121	21.609	1.00	33.06
ATOM	467	CB	GLU	217	71.269	53.153	21.110	1.00	34.93
ATOM	468	CG	GLU	217	71.824	54.557	20.921	1.00	38.98
ATOM	469	CD	GLU	217	70.986	55.399	19.963	1.00	41.92
ATOM	470	OE1	GLU	217	70.177	56.221	20.444	1.00	44.02
ATOM	471	OE2	GLU	217	71.139	55.246	18.731	1.00	44.46
ATOM	472	C	GLU	217	69.199	51.759	21.330	1.00	31.78
ATOM	473	O	GLU	217	68.447	51.607	20.369	1.00	32.51
ATOM	474	N	PHE	218	69.477	50.779	22.181	1.00	29.80

ATOM	475	CA	PHE	218	68.924	49.447	21.979	1.00 27.65
ATOM	476	CB	PHE	218	69.668	48.416	22.827	1.00 26.79
ATOM	477	CG	PHE	218	71.114	48.292	22.467	1.00 24.76
ATOM	478	CD1	PHE	218	72.083	48.191	23.446	1.00 24.37
ATOM	479	CD2	PHE	218	71.510	48.354	21.134	1.00 24.30
ATOM	480	CE1	PHE	218	73.424	48.167	23.106	1.00 23.85
ATOM	481	CE2	PHE	218	72.843	48.329	20.785	1.00 23.07
ATOM	482	CZ	PHE	218	73.804	48.236	21.772	1.00 24.45
ATOM	483	C	PHE	218	67.441	49.403	22.255	1.00 26.94
ATOM	484	O	PHE	218	66.658	48.985	21.409	1.00 27.98
ATOM	485	N	THR	219	67.032	49.906	23.405	1.00 26.97
ATOM	486	CA	THR	219	65.619	49.876	23.740	1.00 27.25
ATOM	487	CB	THR	219	65.379	50.304	25.195	1.00 27.35
ATOM	488	OG1	THR	219	65.924	51.612	25.410	1.00 26.48
ATOM	489	CG2	THR	219	66.034	49.303	26.139	1.00 24.51
ATOM	490	C	THR	219	64.747	50.689	22.782	1.00 27.21
ATOM	491	O	THR	219	63.588	50.348	22.557	1.00 28.58
ATOM	492	N	LYS	220	65.318	51.726	22.184	1.00 26.75
ATOM	493	CA	LYS	220	64.576	52.569	21.254	1.00 27.81
ATOM	494	CB	LYS	220	65.439	53.753	20.782	1.00 27.46
ATOM	495	C	LYS	220	64.058	51.772	20.056	1.00 28.62
ATOM	496	O	LYS	220	63.014	52.101	19.500	1.00 28.63
ATOM	497	N	ILE	221	64.774	50.721	19.662	1.00 28.92
ATOM	498	CA	ILE	221	64.331	49.907	18.527	1.00 28.19
ATOM	499	CB	ILE	221	65.450	49.732	17.465	1.00 27.17
ATOM	500	CG2	ILE	221	65.866	51.095	16.911	1.00 26.61
ATOM	501	CG1	ILE	221	66.645	48.977	18.061	1.00 26.80
ATOM	502	CD1	ILE	221	67.621	48.417	17.029	1.00 24.91
ATOM	503	C	ILE	221	63.840	48.512	18.937	1.00 28.82
ATOM	504	O	ILE	221	63.552	47.678	18.076	1.00 28.59
ATOM	505	N	ILE	222	63.690	48.263	20.236	1.00 27.09
ATOM	506	CA	ILE	222	63.279	46.934	20.665	1.00 27.22
ATOM	507	CB	ILE	222	63.777	46.591	22.101	1.00 26.58
ATOM	508	CG2	ILE	222	62.815	47.151	23.171	1.00 23.83
ATOM	509	CG1	ILE	222	63.949	45.065	22.230	1.00 24.15
ATOM	510	CD1	ILE	222	64.727	44.610	23.458	1.00 21.43
ATOM	511	C	ILE	222	61.797	46.614	20.519	1.00 28.33
ATOM	512	O	ILE	222	61.445	45.459	20.260	1.00 29.81
ATOM	513	N	THR	223	60.929	47.618	20.622	1.00 27.63
ATOM	514	CA	THR	223	59.494	47.366	20.505	1.00 26.83
ATOM	515	CB	THR	223	58.667	48.631	20.797	1.00 29.85
ATOM	516	OG1	THR	223	58.839	48.983	22.180	1.00 30.67
ATOM	517	CG2	THR	223	57.183	48.390	20.525	1.00 26.50
ATOM	518	C	THR	223	59.103	46.698	19.183	1.00 25.28
ATOM	519	O	THR	223	58.390	45.691	19.196	1.00 24.87
ATOM	520	N	PRO	224	59.535	47.256	18.031	1.00 23.96
ATOM	521	CD	PRO	224	60.138	48.580	17.792	1.00 22.28

ATOM	522	CA	PRO	224	59.181	46.612	16.759	1.00	23.13
ATOM	523	CB	PRO	224	59.747	47.570	15.699	1.00	22.96
ATOM	524	CG	PRO	224	60.762	48.406	16.443	1.00	24.53
ATOM	525	C	PRO	224	59.790	45.204	16.634	1.00	22.56
ATOM	526	O	PRO	224	59.198	44.332	15.994	1.00	22.77
ATOM	527	N·	ALA	225	60.960	44.989	17.240	1.00	19.17
ATOM	528	CA	ALA	225	61.622	43.684	17.213	1.00	18.54
ATOM	529	CB	ALA	225	63.009	43.773	17.806	1.00	16.79
ATOM	530	C	ALA	225	60.802	42.643	17.969	1.00	19.08
ATOM	531	O	ALA	225	60.681	41.502	17.523	1.00	21.30
ATOM	532	N	ILE	226	60.253	43.033	19.117	1.00	18.30
ATOM	533	CA	ILE	226	59.420	42.147	19.929	1.00	18.65
ATOM	534	CB	ILE	226	59.092	42.779	21.288	1.00	17.30
ATOM	535	CG2	ILE	226	58.057	41.952	22.020	1.00	17.76
ATOM	536	CG1	ILE	226	60.361	42.915	22.123	1.00	17.07
ATOM	537	CD1	ILE	226	60.175	43.775	23.351	1.00	14.65
ATOM	538	C	ILE	226	58.109	41.858	19.199	1.00	19.56
ATOM	539	O	ILE	226	57.638	40.719	19.163	1.00	19.51
ATOM	540	N	THR	227	57.521	42.903	18.627	1.00	20.26
ATOM	541	CA	THR	227	56.278	42.782	17.881	1.00	21.19
ATOM	542	CB	THR	227	55.856	44.150	17.326	1.00	22.41
ATOM	543	OG1	THR	227	55.670	45.053	18.420	1.00	25.09
ATOM	544	CG2	THR	227	54.558	44.041	16.560	1.00	24.29
ATOM	545	C	THR	227	56.411	41.758	16.742	1.00	20.16
ATOM	546	O	THR	227	55.487	40.978	16.496	1.00	21.18
ATOM	547	N	ARG	228	57.558	41.744	16.069	1.00	18.42
ATOM	548	CA	ARG	228	57.783	40.786	14.991	1.00	18.29
ATOM	549	CB	ARG	228	59.032	41.136	14.191	1.00	19.95
ATOM	550	CG	ARG	228	58.810	42.349	13.286	1.00	23.31
ATOM	551	CD	ARG	228	60.001	42.646	12.405	1.00	25.64
ATOM	552	NE	ARG	228	61.139	43.138	13.171	1.00	27.01
ATOM	553	CZ	ARG	228	62.209	42.413	13.468	1.00	28.20
ATOM	554	NH1	ARG	228	62.280	41.155	13.067	1.00	28.99
ATOM	555	NH2	ARG	228	63.219	42.951	14.141	1.00	27.25
ATOM	556	C	ARG	228	57.834	39.352	15.502	1.00	18.40
ATOM	557	O	ARG	228	57.433	38.431	14.788	1.00	17.50
ATOM	558	N	VAL	229	58.278	39.162	16.747	1.00	17.42
ATOM	559	CA	VAL	229	58.316	37.822	17.334	1.00	16.40
ATOM	560	CB	VAL	229	59.116	37.779	18.674	1.00	15.88
ATOM	561	CG1	VAL	229	58.955	36.422	19.334	1.00	16.19
ATOM	562	CG2	VAL	229	60.591	38.010	18.421	1.00	14.44
ATOM	563	C	VAL	229	56.852	37.408	17.552	1.00	16.75
ATOM	564	O	VAL	229	56.456	36.282	17.219	1.00	16.06
ATOM	565	N	VAL	230	56.039	38.343	18.046	1.00	16.09
ATOM	566	CA	VAL	230	54.612	38.097	18.266	1.00	16.97
ATOM	567	CB	VAL	230	53.896	39.327	18.897	1.00	18.60
ATOM	568	CG1	VAL	230	52.401	39.084	18.972	1.00	17.19

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ATOM   569 CG2 VAL   230    54.445 39.629 20.299 1.00 17.82
ATOM   570 C   VAL   230    53.938 37.780 16.916 1.00 18.46
ATOM   571 O   VAL   230    53.115 36.863 16.828 1.00 18.46
ATOM   572 N   ASP   231    54.289 38.539 15.874 1.00 19.21
ATOM   573 CA  ASP   231    53.730 38.339 14.531 1.00 19.93
ATOM   574 CB  ASP   231    54.231 39.415 13.555 1.00 20.98
ATOM   575 CG  ASP   231    53.754 40.817 13.915 1.00 24.11
ATOM   576 OD1 ASP   231    52.704 40.953 14.586 1.00 24.23
ATOM   577 OD2 ASP   231    54.443 41.784 13.522 1.00 25.90
ATOM   578 C   ASP   231    54.097 36.962 13.982 1.00 19.27
ATOM   579 O   ASP   231    53.266 36.279 13.380 1.00 17.80
ATOM   580 N   PHE   232    55.357 36.582 14.163 1.00 18.91
ATOM   581 CA  PHE   232    55.841 35.288 13.712 1.00 19.65
ATOM   582 CB  PHE   232    57.308 35.078 14.104 1.00 18.14
ATOM   583 CG  PHE   232    57.752 33.639 14.027 1.00 19.70
ATOM   584 CD1 PHE   232    57.895 33.005 12.799 1.00 19.18
ATOM   585 CD2 PHE   232    57.987 32.904 15.188 1.00 17.61
ATOM   586 CE1 PHE   232    58.259 31.660 12.723 1.00 19.86
ATOM   587 CE2 PHE   232    58.350 31.560 15.126 1.00 18.98
ATOM   588 CZ  PHE   232    58.487 30.935 13.892 1.00 19.46
ATOM   589 C   PHE   232    54.996 34.179 14.320 1.00 21.02
ATOM   590 O   PHE   232    54.458 33.339 13.598 1.00 20.88
ATOM   591 N   ALA   233    54.863 34.202 15.645 1.00 21.64
ATOM   592 CA  ALA   233    54.106 33.187 16.378 1.00 21.43
ATOM   593 CB  ALA   233    54.223 33.443 17.868 1.00 18.72
ATOM   594 C   ALA   233    52.643 33.134 15.955 1.00 23.15
ATOM   595 O   ALA   233    52.043 32.062 15.857 1.00 21.76
ATOM   596 N   LYS   234    52.083 34.307 15.689 1.00 25.54
ATOM   597 CA  LYS   234    50.695 34.446 15.273 1.00 27.57
ATOM   598 CB  LYS   234    50.360 35.935 15.146 1.00 30.65
ATOM   599 CG  LYS   234    49.110 36.349 15.867 1.00 36.27
ATOM   600 CD  LYS   234    49.192 35.988 17.334 1.00 41.19
ATOM   601 CE  LYS   234    47.800 35.677 17.890 1.00 43.69
ATOM   602 NZ  LYS   234    47.119 34.565 17.147 1.00 44.98
ATOM   603 C   LYS   234    50.443 33.739 13.933 1.00 27.70
ATOM   604 O   LYS   234    49.355 33.200 13.693 1.00 28.42
ATOM   605 N   LYS   235    51.458 33.732 13.074 1.00 26.06
ATOM   606 CA  LYS   235    51.364 33.113 11.758 1.00 26.47
ATOM   607 CB  LYS   235    52.350 33.791 10.819 1.00 25.23
ATOM   608 CG  LYS   235    52.051 35.269 10.644 1.00 26.92
ATOM   609 CD  LYS   235    53.017 35.959  9.697 1.00 28.41
ATOM   610 CE  LYS   235    52.500 37.350  9.318 1.00 29.31
ATOM   611 NZ  LYS   235    53.400 38.026  8.347 1.00 30.37
ATOM   612 C   LYS   235    51.540 31.588 11.722 1.00 27.93
ATOM   613 O   LYS   235    51.540 30.984 10.649 1.00 29.04
ATOM   614 N   LEU   236    51.718 30.973 12.887 1.00 28.83
ATOM   615 CA  LEU   236    51.866 29.524 12.986 1.00 29.05
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ATOM   616  CB  LEU  236      52.928  29.150  14.026  1.00 27.43
ATOM   617  CG  LEU  236      54.352  29.660  13.774  1.00 25.84
ATOM   618  CD1 LEU  236      55.311  29.118  14.847  1.00 23.99
ATOM   619  CD2 LEU  236      54.801  29.236  12.389  1.00 23.86
ATOM   620  C   LEU  236      50.513  28.948  13.392  1.00 31.19
ATOM   621  O   LEU  236      49.870  29.435  14.328  1.00 31.48
ATOM   622  N   PRO  237      50.078  27.875  12.717  1.00 34.60
ATOM   623  CD  PRO  237      50.829  27.156  11.668  1.00 35.04
ATOM   624  CA  PRO  237      48.789  27.223  13.002  1.00 36.52
ATOM   625  CB  PRO  237      48.751  26.081  11.981  1.00 37.48
ATOM   626  CG  PRO  237      50.229  25.776  11.718  1.00 36.60
ATOM   627  C   PRO  237      48.582  26.720  14.447  1.00 37.82
ATOM   628  O   PRO  237      47.629  27.102  15.125  1.00 37.08
ATOM   629  N   MET  238      49.495  25.893  14.935  1.00 40.42
ATOM   630  CA  MET  238      49.366  25.350  16.285  1.00 43.00
ATOM   631  CB  MET  238      50.453  24.298  16.549  1.00 45.20
ATOM   632  CG  MET  238      50.043  22.837  16.296  1.00 47.16
ATOM   633  SD  MET  238      50.598  22.117  14.725  1.00 52.25
ATOM   634  CE  MET  238      52.305  21.809  15.033  1.00 47.29
ATOM   635  C   MET  238      49.389  26.389  17.414  1.00 43.25
ATOM   636  O   MET  238      49.061  26.056  18.558  1.00 44.74
ATOM   637  N   PHE  239      49.720  27.642  17.088  1.00 41.55
ATOM   638  CA  PHE  239      49.825  28.716  18.091  1.00 37.31
ATOM   639  CB  PHE  239      51.031  29.615  17.765  1.00 32.40
ATOM   640  CG  PHE  239      51.293  30.673  18.795  1.00 27.12
ATOM   641  CD1 PHE  239      52.099  30.398  19.893  1.00 24.57
ATOM   642  CD2 PHE  239      50.705  31.933  18.686  1.00 24.70
ATOM   643  CE1 PHE  239      52.319  31.356  20.876  1.00 25.09
ATOM   644  CE2 PHE  239      50.915  32.901  19.659  1.00 25.90
ATOM   645  CZ  PHE  239      51.726  32.612  20.761  1.00 24.52
ATOM   646  C   PHE  239      48.574  29.582  18.352  1.00 36.84
ATOM   647  O   PHE  239      48.136  29.728  19.497  1.00 34.67
ATOM   648  N   SER  240      48.027  30.180  17.299  1.00 36.92
ATOM   649  CA  SER  240      46.857  31.038  17.433  1.00 37.16
ATOM   650  CB  SER  240      46.534  31.706  16.094  1.00 38.34
ATOM   651  C   SER  240      45.627  30.304  17.981  1.00 37.30
ATOM   652  O   SER  240      44.680  30.941  18.433  1.00 36.95
ATOM   653  N   GLU  241      45.639  28.974  17.917  1.00 37.73
ATOM   654  CA  GLU  241      44.531  28.155  18.418  1.00 38.44
ATOM   655  CB  GLU  241      44.644  26.705  17.912  1.00 42.18
ATOM   656  CG  GLU  241      44.290  26.471  16.436  1.00 48.01
ATOM   657  CD  GLU  241      44.559  25.028  15.973  1.00 50.12
ATOM   658  OE1 GLU  241      44.375  24.088  16.779  1.00 51.14
ATOM   659  OE2 GLU  241      44.957  24.838  14.799  1.00 50.68
ATOM   660  C   GLU  241      44.571  28.122  19.937  1.00 35.85
ATOM   661  O   GLU  241      43.561  27.868  20.598  1.00 36.01
ATOM   662  N   LEU  242      45.762  28.329  20.480  1.00 33.28
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ATOM	663	CA	LEU	242	45.959	28.296	21.920	1.00	31.31
ATOM	664	CB	LEU	242	47.452	28.382	22.244	1.00	29.28
ATOM	665	CG	LEU	242	48.318	27.202	21.797	1.00	29.95
ATOM	666	CD1	LEU	242	49.771	27.538	22.025	1.00	29.19
ATOM	667	CD2	LEU	242	47.935	25.931	22.564	1.00	29.57
ATOM	668	C	LEU	242	45.223	29.390	22.676	1.00	30.10
ATOM	669	O	LEU	242	44.874	30.434	22.116	1.00	28.69
ATOM	670	N	PRO	243	44.867	29.115	23.937	1.00	30.09
ATOM	671	CD	PRO	243	44.783	27.843	24.674	1.00	28.53
ATOM	672	CA	PRO	243	44.183	30.200	24.640	1.00	31.01
ATOM	673	CB	PRO	243	43.829	29.577	26.005	1.00	30.34
ATOM	674	CG	PRO	243	44.640	28.300	26.093	1.00	29.25
ATOM	675	C	PRO	243	45.195	31.356	24.774	1.00	31.71
ATOM	676	O	PRO	243	46.412	31.128	24.840	1.00	30.69
ATOM	677	N	CYS	244	44.694	32.585	24.804	1.00	32.36
ATOM	678	CA	CYS	244	45.539	33.763	24.920	1.00	33.57
ATOM	679	CB	CYS	244	44.675	35.028	25.050	1.00	37.62
ATOM	680	SG	CYS	244	45.262	36.418	24.022	1.00	51.95
ATOM	681	C	CYS	244	46.536	33.660	26.081	1.00	31.12
ATOM	682	O	CYS	244	47.677	34.087	25.942	1.00	30.37
ATOM	683	N	GLU	245	46.124	33.045	27.194	1.00	30.00
ATOM	684	CA	GLU	245	46.993	32.877	28.366	1.00	29.62
ATOM	685	CB	GLU	245	46.270	32.159	29.514	1.00	33.10
ATOM	686	CG	GLU	245	45.325	33.018	30.333	1.00	36.43
ATOM	687	CD	GLU	245	43.882	32.940	29.860	1.00	37.87
ATOM	688	OE1	GLU	245	42.989	33.006	30.730	1.00	37.36
ATOM	689	OE2	GLU	245	43.639	32.813	28.634	1.00	39.63
ATOM	690	C	GLU	245	48.239	32.077	28.030	1.00	28.34
ATOM	691	O	GLU	245	49.322	32.343	28.557	1.00	27.88
ATOM	692	N	ASP	246	48.063	31.043	27.213	1.00	26.10
ATOM	693	CA	ASP	246	49.182	30.212	26.798	1.00	25.23
ATOM	694	CB	ASP	246	48.685	28.923	26.135	1.00	26.98
ATOM	695	CG	ASP	246	48.146	27.912	27.137	1.00	29.13
ATOM	696	OD1	ASP	246	48.158	28.193	28.354	1.00	26.52
ATOM	697	OD2	ASP	246	47.712	26.824	26.696	1.00	31.38
ATOM	698	C	ASP	246	50.065	30.983	25.826	1.00	23.57
ATOM	699	O	ASP	246	51.288	30.993	25.955	1.00	22.61
ATOM	700	N	GLN	247	49.431	31.630	24.852	1.00	23.23
ATOM	701	CA	GLN	247	50.144	32.408	23.855	1.00	22.20
ATOM	702	CB	GLN	247	49.159	33.178	22.991	1.00	22.06
ATOM	703	CG	GLN	247	48.329	32.307	22.066	1.00	22.74
ATOM	704	CD	GLN	247	47.435	33.141	21.169	1.00	24.91
ATOM	705	OE1	GLN	247	47.860	34.160	20.625	1.00	26.30
ATOM	706	NE2	GLN	247	46.186	32.732	21.035	1.00	25.65
ATOM	707	C	GLN	247	51.098	33.374	24.528	1.00	22.10
ATOM	708	O	GLN	247	52.280	33.454	24.182	1.00	23.07
ATOM	709	N	ILE	248	50.587	34.076	25.527	1.00	23.27

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ATOM    710 CA  ILE   248    51.379 35.042 26.276 1.00 23.21
ATOM    711 CB  ILE   248    50.473 35.824 27.273 1.00 24.59
ATOM    712 CG2 ILE   248    51.304 36.682 28.242 1.00 24.09
ATOM    713 CG1 ILE   248    49.499 36.707 26.487 1.00 23.47
ATOM    714 CD1 ILE   248    48.413 37.323 27.341 1.00 23.84
ATOM    715 C`  ILE   248    52.568 34.387 26.986 1.00 22.27
ATOM    716 O   ILE   248    53.705 34.833 26.829 1.00 22.06
ATOM    717 N   ILE   249    52.321 33.313 27.729 1.00 21.40
ATOM    718 CA  ILE   249    53.398 32.630 28.440 1.00 21.40
ATOM    719 CB  ILE   249    52.850 31.438 29.279 1.00 23.53
ATOM    720 CG2 ILE   249    53.972 30.489 29.711 1.00 21.44
ATOM    721 CG1 ILE   249    52.098 31.963 30.500 1.00 22.76
ATOM    722 CD1 ILE   249    51.252 30.911 31.175 1.00 25.03
ATOM    723 C   ILE   249    54.481 32.148 27.470 1.00 22.24
ATOM    724 O   ILE   249    55.677 32.321 27.733 1.00 22.90
ATOM    725 N   LEU   250    54.072 31.582 26.334 1.00 22.65
ATOM    726 CA  LEU   250    55.028 31.079 25.345 1.00 21.40
ATOM    727 CB  LEU   250    54.319 30.290 24.239 1.00 20.06
ATOM    728 CG  LEU   250    53.566 29.038 24.677 1.00 20.22
ATOM    729 CD1 LEU   250    52.952 28.406 23.453 1.00 19.19
ATOM    730 CD2 LEU   250    54.494 28.050 25.386 1.00 18.52
ATOM    731 C   LEU   250    55.850 32.209 24.736 1.00 20.82
ATOM    732 O   LEU   250    57.069 32.094 24.603 1.00 20.27
ATOM    733 N   LEU   251    55.179 33.302 24.384 1.00 22.14
ATOM    734 CA  LEU   251    55.842 34.467 23.805 1.00 22.90
ATOM    735 CB  LEU   251    54.806 35.543 23.471 1.00 22.76
ATOM    736 CG  LEU   251    54.513 35.899 22.012 1.00 23.35
ATOM    737 CD1 LEU   251    55.347 35.103 21.047 1.00 22.38
ATOM    738 CD2 LEU   251    53.040 35.708 21.747 1.00 22.86
ATOM    739 C   LEU   251    56.891 35.030 24.776 1.00 23.67
ATOM    740 O   LEU   251    58.051 35.234 24.402 1.00 22.58
ATOM    741 N   LYS   252    56.491 35.236 26.029 1.00 24.64
ATOM    742 CA  LYS   252    57.395 35.754 27.057 1.00 26.22
ATOM    743 CB  LYS   252    56.617 36.037 28.350 1.00 27.79
ATOM    744 CG  LYS   252    55.351 36.838 28.093 1.00 32.69
ATOM    745 CD  LYS   252    55.185 38.023 29.003 1.00 35.85
ATOM    746 CE  LYS   252    54.773 37.626 30.397 1.00 39.34
ATOM    747 NZ  LYS   252    54.477 38.870 31.168 1.00 44.60
ATOM    748 C   LYS   252    58.566 34.793 27.312 1.00 25.26
ATOM    749 O   LYS   252    59.701 35.222 27.555 1.00 26.67
ATOM    750 N   GLY   253    58.306 33.497 27.195 1.00 23.97
ATOM    751 CA  GLY   253    59.356 32.521 27.404 1.00 22.00
ATOM    752 C   GLY   253    60.397 32.429 26.292 1.00 23.10
ATOM    753 O   GLY   253    61.568 32.165 26.585 1.00 25.12
ATOM    754 N   CYS   254    60.014 32.702 25.041 1.00 22.27
ATOM    755 CA  CYS   254    60.944 32.584 23.908 1.00 20.91
ATOM    756 CB  CYS   254    60.353 31.648 22.845 1.00 21.46
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ATOM   757 SG  CYS  254    58.992 32.385 21.893 1.00 22.92
ATOM   758 C   CYS  254    61.354 33.869 23.201 1.00 19.77
ATOM   759 O   CYS  254    62.215 33.834 22.316 1.00 19.88
ATOM   760 N   CYS  255    60.731 34.984 23.561 1.00 19.56
ATOM   761 CA  CYS  255    61.018 36.264 22.917 1.00 21.16
ATOM   762 CB  CYS  255    60.292 37.407 23.634 1.00 21.21
ATOM   763 SG  CYS  255    60.404 38.957 22.735 1.00 22.22
ATOM   764 C   CYS  255    62.504 36.590 22.775 1.00 21.36
ATOM   765 O   CYS  255    62.986 36.847 21.667 1.00 20.58
ATOM   766 N   MET  256    63.232 36.574 23.887 1.00 20.52
ATOM   767 CA  MET  256    64.657 36.874 23.835 1.00 20.07
ATOM   768 CB  MET  256    65.255 36.967 25.253 1.00 20.39
ATOM   769 CG  MET  256    66.744 37.360 25.267 1.00 19.20
ATOM   770 SD  MET  256    67.066 38.952 24.447 1.00 20.26
ATOM   771 CE  MET  256    68.856 38.971 24.375 1.00 18.47
ATOM   772 C   MET  256    65.408 35.830 23.005 1.00 18.75
ATOM   773 O   MET  256    66.305 36.164 22.225 1.00 18.15
ATOM   774 N   GLU  257    65.035 34.568 23.170 1.00 19.00
ATOM   775 CA  GLU  257    65.685 33.480 22.443 1.00 19.71
ATOM   776 CB  GLU  257    65.104 32.145 22.882 1.00 21.15
ATOM   777 CG  GLU  257    65.451 31.821 24.319 1.00 26.39
ATOM   778 CD  GLU  257    64.513 30.820 24.929 1.00 30.75
ATOM   779 OE1 GLU  257    63.875 30.069 24.162 1.00 32.36
ATOM   780 OE2 GLU  257    64.415 30.783 26.172 1.00 33.70
ATOM   781 C   GLU  257    65.545 33.648 20.940 1.00 18.54
ATOM   782 O   GLU  257    66.521 33.506 20.197 1.00 17.58
ATOM   783 N   ILE  258    64.336 33.977 20.497 1.00 17.78
ATOM   784 CA  ILE  258    64.101 34.176 19.081 1.00 17.60
ATOM   785 CB  ILE  258    62.590 34.267 18.765 1.00 16.35
ATOM   786 CG2 ILE  258    62.376 34.777 17.326 1.00 16.20
ATOM   787 CG1 ILE  258    61.935 32.884 18.980 1.00 17.24
ATOM   788 CD1 ILE  258    60.437 32.787 18.593 1.00 14.08
ATOM   789 C   ILE  258    64.872 35.408 18.595 1.00 19.11
ATOM   790 O   ILE  258    65.609 35.326 17.601 1.00 19.02
ATOM   791 N   MET  259    64.785 36.517 19.341 1.00 19.71
ATOM   792 CA  MET  259    65.486 37.744 18.956 1.00 18.43
ATOM   793 CB  MET  259    65.162 38.890 19.910 1.00 19.99
ATOM   794 CG  MET  259    63.700 39.278 19.962 1.00 21.15
ATOM   795 SD  MET  259    63.452 40.921 20.700 1.00 24.33
ATOM   796 CE  MET  259    63.769 40.595 22.415 1.00 22.50
ATOM   797 C   MET  259    66.993 37.540 18.888 1.00 18.64
ATOM   798 O   MET  259    67.638 37.993 17.941 1.00 19.96
ATOM   799 N   SER  260    67.556 36.858 19.884 1.00 17.37
ATOM   800 CA  SER  260    68.993 36.592 19.915 1.00 16.76
ATOM   801 CB  SER  260    69.387 35.840 21.195 1.00 17.25
ATOM   802 OG  SER  260    69.078 36.589 22.346 1.00 22.89
ATOM   803 C   SER  260    69.387 35.750 18.717 1.00 15.13
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ATOM	804	O	SER	260	70.460	35.941	18.137	1.00	16.62
ATOM	805	N	LEU	261	68.539	34.781	18.385	1.00	15.15
ATOM	806	CA	LEU	261	68.802	33.900	17.262	1.00	15.31
ATOM	807	CB	LEU	261	67.708	32.834	17.153	1.00	15.43
ATOM	808	CG	LEU	261	67.652	32.014	15.858	1.00	15.82
ATOM	809	CD1	LEU	261	68.963	31.251	15.621	1.00	16.35
ATOM	810	CD2	LEU	261	66.470	31.060	15.937	1.00	13.72
ATOM	811	C	LEU	261	68.839	34.741	16.001	1.00	16.31
ATOM	812	O	LEU	261	69.766	34.619	15.194	1.00	16.68
ATOM	813	N	ARG	262	67.848	35.620	15.853	1.00	16.47
ATOM	814	CA	ARG	262	67.778	36.493	14.680	1.00	16.66
ATOM	815	CB	ARG	262	66.475	37.279	14.693	1.00	16.00
ATOM	816	CG	ARG	262	65.291	36.404	14.354	1.00	15.62
ATOM	817	CD	ARG	262	63.995	37.167	14.378	1.00	17.31
ATOM	818	NE	ARG	262	62.967	36.454	13.628	1.00	20.09
ATOM	819	CZ	ARG	262	61.755	36.932	13.361	1.00	21.06
ATOM	820	NH1	ARG	262	61.390	38.136	13.787	1.00	19.02
ATOM	821	NH2	ARG	262	60.909	36.207	12.640	1.00	22.63
ATOM	822	C	ARG	262	69.003	37.396	14.527	1.00	16.80
ATOM	823	O	ARG	262	69.440	37.664	13.412	1.00	16.82
ATOM	824	N	ALA	263	69.578	37.832	15.650	1.00	17.77
ATOM	825	CA	ALA	263	70.795	38.647	15.637	1.00	18.41
ATOM	826	CB	ALA	263	70.996	39.337	17.004	1.00	18.26
ATOM	827	C	ALA	263	71.998	37.740	15.327	1.00	19.15
ATOM	828	O	ALA	263	72.837	38.063	14.475	1.00	19.40
ATOM	829	N	ALA	264	72.056	36.587	15.996	1.00	19.84
ATOM	830	CA	ALA	264	73.155	35.633	15.818	1.00	20.35
ATOM	831	CB	ALA	264	73.045	34.483	16.832	1.00	18.09
ATOM	832	C	ALA	264	73.289	35.079	14.398	1.00	20.66
ATOM	833	O	ALA	264	74.406	34.870	13.922	1.00	21.04
ATOM	834	N	VAL	265	72.173	34.822	13.723	1.00	21.14
ATOM	835	CA	VAL	265	72.249	34.299	12.358	1.00	22.96
ATOM	836	CB	VAL	265	70.910	33.660	11.879	1.00	21.04
ATOM	837	CG1	VAL	265	70.458	32.600	12.866	1.00	19.48
ATOM	838	CG2	VAL	265	69.838	34.708	11.698	1.00	18.96
ATOM	839	C	VAL	265	72.718	35.387	11.382	1.00	24.66
ATOM	840	O	VAL	265	73.026	35.103	10.224	1.00	26.03
ATOM	841	N	ARG	266	72.777	36.628	11.858	1.00	25.11
ATOM	842	CA	ARG	266	73.233	37.729	11.031	1.00	25.60
ATOM	843	CB	ARG	266	72.187	38.819	10.964	1.00	24.09
ATOM	844	CG	ARG	266	71.035	38.427	10.088	1.00	23.37
ATOM	845	CD	ARG	266	69.998	39.492	10.098	1.00	24.80
ATOM	846	NE	ARG	266	68.961	39.253	9.109	1.00	24.01
ATOM	847	CZ	ARG	266	67.833	39.940	9.069	1.00	23.26
ATOM	848	NH1	ARG	266	67.613	40.880	9.970	1.00	24.16
ATOM	849	NH2	ARG	266	66.960	39.733	8.099	1.00	23.31
ATOM	850	C	ARG	266	74.543	38.273	11.543	1.00	28.07

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ATOM   851 O   ARG  266    74.786 39.479 11.517 1.00 29.67
ATOM   852 N   TYR  267    75.367 37.366 12.053 1.00 28.90
ATOM   853 CA  TYR  267    76.679 37.714 12.558 1.00 30.23
ATOM   854 CB  TYR  267    77.223 36.584 13.434 1.00 29.98
ATOM   855 CG  TYR  267    78.699 36.702 13.727 1.00 31.75
ATOM   856 CD1 TYR  267    79.179 37.577 14.712 1.00 31.21
ATOM   857 CE1 TYR  267    80.544 37.705 14.950 1.00 31.29
ATOM   858 CD2 TYR  267    79.625 35.958 12.994 1.00 31.84
ATOM   859 CE2 TYR  267    80.986 36.078 13.222 1.00 32.15
ATOM   860 CZ  TYR  267    81.442 36.949 14.197 1.00 32.60
ATOM   861 OH  TYR  267    82.801 37.052 14.389 1.00 34.13
ATOM   862 C   TYR  267    77.570 37.900 11.343 1.00 31.17
ATOM   863 O   TYR  267    77.543 37.086 10.426 1.00 30.91
ATOM   864 N   ASP  268    78.361 38.966 11.336 1.00 33.09
ATOM   865 CA  ASP  268    79.252 39.233 10.216 1.00 35.57
ATOM   866 CB  ASP  268    79.085 40.679  9.747 1.00 39.39
ATOM   867 CG  ASP  268    79.796 40.954  8.432 1.00 42.22
ATOM   868 OD1 ASP  268    79.426 40.331  7.412 1.00 46.07
ATOM   869 OD2 ASP  268    80.718 41.798  8.415 1.00 44.30
ATOM   870 C   ASP  268    80.700 38.967 10.620 1.00 35.72
ATOM   871 O   ASP  268    81.287 39.737 11.384 1.00 34.49
ATOM   872 N   PRO  269    81.295 37.872 10.108 1.00 37.00
ATOM   873 CD  PRO  269    80.712 36.887  9.182 1.00 36.77
ATOM   874 CA  PRO  269    82.679 37.514 10.427 1.00 38.52
ATOM   875 CB  PRO  269    82.905 36.239  9.611 1.00 37.06
ATOM   876 CG  PRO  269    81.549 35.669  9.453 1.00 36.19
ATOM   877 C   PRO  269    83.656 38.613 10.019 1.00 40.96
ATOM   878 O   PRO  269    84.586 38.929 10.760 1.00 42.23
ATOM   879 N   ALA  270    83.418 39.209  8.854 1.00 41.92
ATOM   880 CA  ALA  270    84.277 40.272  8.342 1.00 42.08
ATOM   881 CB  ALA  270    83.709 40.838  7.029 1.00 42.64
ATOM   882 C   ALA  270    84.495 41.394  9.355 1.00 41.70
ATOM   883 O   ALA  270    85.632 41.709  9.684 1.00 42.25
ATOM   884 N   SER  271    83.408 41.970  9.865 1.00 41.87
ATOM   885 CA  SER  271    83.495 43.073 10.830 1.00 40.75
ATOM   886 CB  SER  271    82.454 44.143 10.500 1.00 40.60
ATOM   887 OG  SER  271    81.150 43.590 10.464 1.00 40.31
ATOM   888 C   SER  271    83.344 42.658 12.290 1.00 39.99
ATOM   889 O   SER  271    83.484 43.487 13.194 1.00 38.77
ATOM   890 N   ASP  272    83.042 41.381 12.508 1.00 38.94
ATOM   891 CA  ASP  272    82.859 40.844 13.845 1.00 37.78
ATOM   892 CB  ASP  272    84.182 40.904 14.625 1.00 38.86
ATOM   893 CG  ASP  272    84.094 40.255 16.000 1.00 41.09
ATOM   894 OD1 ASP  272    83.342 39.275 16.173 1.00 41.64
ATOM   895 OD2 ASP  272    84.781 40.734 16.924 1.00 43.84
ATOM   896 C   ASP  272    81.744 41.634 14.536 1.00 36.92
ATOM   897 O   ASP  272    81.907 42.156 15.648 1.00 37.56
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ATOM	898	N	THR	273	80.603	41.723	13.865	1.00	33.65
ATOM	899	CA	THR	273	79.469	42.443	14.425	1.00	31.57
ATOM	900	CB	THR	273	79.246	43.790	13.695	1.00	31.69
ATOM	901	OG1	THR	273	79.087	43.557	12.289	1.00	30.71
ATOM	902	CG2	THR	273	80.426	44.730	13.922	1.00	31.53
ATOM	903	C ·	THR	273	78.184	41.631	14.310	1.00	30.15
ATOM	904	O	THR	273	78.104	40.697	13.504	1.00	30.10
ATOM	905	N	LEU	274	77.213	41.942	15.164	1.00	27.09
ATOM	906	CA	LEU	274	75.907	41.303	15.103	1.00	25.94
ATOM	907	CB	LEU	274	75.396	40.936	16.496	1.00	24.47
ATOM	908	CG	LEU	274	76.020	39.731	17.206	1.00	23.33
ATOM	909	CD1	LEU	274	75.436	39.631	18.602	1.00	21.14
ATOM	910	CD2	LEU	274	75.792	38.444	16.427	1.00	20.04
ATOM	911	C	LEU	274	75.010	42.377	14.500	1.00	26.57
ATOM	912	O	LEU	274	75.339	43.557	14.568	1.00	27.03
ATOM	913	N	THR	275	73.914	41.987	13.865	1.00	26.60
ATOM	914	CA	THR	275	73.009	42.966	13.285	1.00	26.48
ATOM	915	CB	THR	275	72.786	42.717	11.781	1.00	26.52
ATOM	916	OG1	THR	275	74.044	42.719	11.097	1.00	28.67
ATOM	917	CG2	THR	275	71.919	43.799	11.198	1.00	27.35
ATOM	918	C	THR	275	71.674	42.898	14.014	1.00	26.57
ATOM	919	O	THR	275	71.069	41.825	14.121	1.00	28.50
ATOM	920	N	LEU	276	71.236	44.026	14.564	1.00	25.18
ATOM	921	CA	LEU	276	69.970	44.069	15.276	1.00	24.61
ATOM	922	CB	LEU	276	70.057	44.987	16.506	1.00	23.61
ATOM	923	CG	LEU	276	71.199	44.730	17.503	1.00	24.36
ATOM	924	CD1	LEU	276	71.039	45.654	18.709	1.00	19.91
ATOM	925	CD2	LEU	276	71.225	43.253	17.947	1.00	22.20
ATOM	926	C	LEU	276	68.894	44.560	14.322	1.00	25.63
ATOM	927	O	LEU	276	69.100	45.556	13.623	1.00	25.35
ATOM	928	N	SER	277	67.787	43.814	14.249	1.00	25.94
ATOM	929	CA	SER	277	66.634	44.141	13.403	1.00	24.61
ATOM	930	CB	SER	277	65.874	45.335	13.987	1.00	21.96
ATOM	931	OG	SER	277	65.368	45.029	15.273	1.00	19.68
ATOM	932	C	SER	277	67.005	44.406	11.946	1.00	25.20
ATOM	933	O	SER	277	66.350	45.199	11.267	1.00	25.21
ATOM	934	N	GLY	278	68.067	43.747	11.489	1.00	27.08
ATOM	935	CA	GLY	278	68.556	43.899	10.127	1.00	29.27
ATOM	936	C	GLY	278	69.022	45.297	9.753	1.00	31.57
ATOM	937	O	GLY	278	69.303	45.564	8.591	1.00	31.42
ATOM	938	N	GLU	279	69.159	46.177	10.740	1.00	33.41
ATOM	939	CA	GLU	279	69.558	47.560	10.484	1.00	34.84
ATOM	940	CB	GLU	279	68.345	48.485	10.650	1.00	36.16
ATOM	941	CG	GLU	279	67.843	48.606	12.090	1.00	38.08
ATOM	942	CD	GLU	279	66.566	49.419	12.206	1.00	41.07
ATOM	943	OE1	GLU	279	66.475	50.279	13.108	1.00	41.98
ATOM	944	OE2	GLU	279	65.643	49.197	11.399	1.00	43.80

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ATOM   945  C   GLU  279     70.706  48.116  11.326  1.00 34.38
ATOM   946  O   GLU  279     71.366  49.057  10.901  1.00 35.60
ATOM   947  N   MET  280     70.944  47.565  12.511  1.00 33.43
ATOM   948  CA  MET  280     72.014  48.085  13.358  1.00 32.27
ATOM   949  CB  MET  280     71.443  48.544  14.702  1.00 31.81
ATOM   950  CG  MET  280     72.471  49.181  15.637  1.00 29.76
ATOM   951  SD  MET  280     71.813  49.482  17.289  1.00 29.63
ATOM   952  CE  MET  280     70.592  50.735  16.989  1.00 24.91
ATOM   953  C   MET  280     73.161  47.119  13.603  1.00 32.51
ATOM   954  O   MET  280     72.995  46.117  14.303  1.00 32.78
ATOM   955  N   ALA  281     74.321  47.408  13.021  1.00 31.74
ATOM   956  CA  ALA  281     75.491  46.564  13.231  1.00 32.25
ATOM   957  CB  ALA  281     76.494  46.740  12.108  1.00 30.91
ATOM   958  C   ALA  281     76.091  47.006  14.563  1.00 33.09
ATOM   959  O   ALA  281     76.261  48.202  14.805  1.00 34.06
ATOM   960  N   VAL  282     76.358  46.053  15.447  1.00 33.78
ATOM   961  CA  VAL  282     76.913  46.366  16.755  1.00 33.45
ATOM   962  CB  VAL  282     75.858  46.208  17.885  1.00 34.92
ATOM   963  CG1 VAL  282     74.775  47.269  17.744  1.00 34.90
ATOM   964  CG2 VAL  282     75.246  44.806  17.860  1.00 34.39
ATOM   965  C   VAL  282     78.119  45.514  17.087  1.00 33.93
ATOM   966  O   VAL  282     78.202  44.347  16.702  1.00 35.11
ATOM   967  N   LYS  283     79.071  46.123  17.777  1.00 33.49
ATOM   968  CA  LYS  283     80.285  45.446  18.187  1.00 34.83
ATOM   969  CB  LYS  283     81.446  46.445  18.183  1.00 35.96
ATOM   970  CG  LYS  283     81.726  47.013  16.797  1.00 39.20
ATOM   971  CD  LYS  283     82.621  48.245  16.844  1.00 43.38
ATOM   972  CE  LYS  283     83.142  48.611  15.455  1.00 44.17
ATOM   973  NZ  LYS  283     84.077  47.563  14.922  1.00 47.27
ATOM   974  C   LYS  283     80.068  44.832  19.572  1.00 33.94
ATOM   975  O   LYS  283     79.134  45.215  20.290  1.00 33.85
ATOM   976  N   ARG  284     80.939  43.895  19.941  1.00 33.63
ATOM   977  CA  ARG  284     80.873  43.184  21.217  1.00 34.00
ATOM   978  CB  ARG  284     82.094  42.285  21.381  1.00 34.04
ATOM   979  CG  ARG  284     82.332  41.369  20.219  1.00 36.31
ATOM   980  CD  ARG  284     83.638  40.643  20.354  1.00 37.03
ATOM   981  NE  ARG  284     83.724  39.576  19.369  1.00 39.27
ATOM   982  CZ  ARG  284     83.323  38.326  19.583  1.00 40.07
ATOM   983  NH1 ARG  284     82.804  37.973  20.759  1.00 39.78
ATOM   984  NH2 ARG  284     83.434  37.428  18.613  1.00 40.16
ATOM   985  C   ARG  284     80.787  44.101  22.419  1.00 35.16
ATOM   986  O   ARG  284     79.884  43.977  23.249  1.00 35.87
ATOM   987  N   GLU  285     81.763  44.993  22.530  1.00 35.75
ATOM   988  CA  GLU  285     81.827  45.939  23.632  1.00 36.86
ATOM   989  CB  GLU  285     83.071  46.818  23.464  1.00 40.47
ATOM   990  CG  GLU  285     83.202  47.973  24.444  1.00 49.23
ATOM   991  CD  GLU  285     83.587  49.284  23.747  1.00 54.22
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ATOM    992  OE1 GLU  285     84.784  49.657  23.760  1.00 55.37
ATOM    993  OE2 GLU  285     82.686  49.942  23.176  1.00 56.95
ATOM    994  C   GLU  285     80.552  46.785  23.684  1.00 34.45
ATOM    995  O   GLU  285     79.990  47.007  24.754  1.00 34.47
ATOM    996  N   GLN  286     80.046  47.166  22.515  1.00 32.27
ATOM    997  CA  GLN  286     78.853  47.991  22.438  1.00 30.35
ATOM    998  CB  GLN  286     78.615  48.472  21.006  1.00 33.34
ATOM    999  CG  GLN  286     79.632  49.497  20.500  1.00 35.09
ATOM   1000  CD  GLN  286     79.293  50.023  19.108  1.00 38.42
ATOM   1001  OE1 GLN  286     79.161  49.248  18.158  1.00 39.03
ATOM   1002  NE2 GLN  286     79.156  51.339  18.982  1.00 37.82
ATOM   1003  C   GLN  286     77.605  47.308  22.970  1.00 29.57
ATOM   1004  O   GLN  286     76.870  47.891  23.770  1.00 26.96
ATOM   1005  N   LEU  287     77.352  46.080  22.524  1.00 29.50
ATOM   1006  CA  LEU  287     76.164  45.350  22.979  1.00 28.93
ATOM   1007  CB  LEU  287     75.831  44.182  22.029  1.00 27.14
ATOM   1008  CG  LEU  287     74.474  43.484  22.227  1.00 24.66
ATOM   1009  CD1 LEU  287     73.316  44.475  22.184  1.00 22.70
ATOM   1010  CD2 LEU  287     74.297  42.413  21.163  1.00 25.17
ATOM   1011  C   LEU  287     76.303  44.874  24.433  1.00 28.10
ATOM   1012  O   LEU  287     75.301  44.748  25.155  1.00 28.58
ATOM   1013  N   LYS  288     77.541  44.652  24.868  1.00 27.97
ATOM   1014  CA  LYS  288     77.808  44.218  26.230  1.00 28.55
ATOM   1015  CB  LYS  288     79.270  43.800  26.376  1.00 28.93
ATOM   1016  CG  LYS  288     79.603  43.254  27.750  1.00 32.46
ATOM   1017  CD  LYS  288     81.015  42.725  27.826  1.00 33.48
ATOM   1018  CE  LYS  288     81.205  41.878  29.071  1.00 35.76
ATOM   1019  NZ  LYS  288     82.525  41.186  29.029  1.00 40.52
ATOM   1020  C   LYS  288     77.497  45.341  27.220  1.00 29.15
ATOM   1021  O   LYS  288     76.782  45.132  28.207  1.00 31.28
ATOM   1022  N   ASN  289     77.996  46.539  26.933  1.00 28.58
ATOM   1023  CA  ASN  289     77.794  47.692  27.811  1.00 28.40
ATOM   1024  CB  ASN  289     78.815  48.775  27.485  1.00 28.28
ATOM   1025  CG  ASN  289     80.224  48.329  27.770  1.00 31.30
ATOM   1026  OD1 ASN  289     80.445  47.442  28.601  1.00 33.02
ATOM   1027  ND2 ASN  289     81.190  48.928  27.087  1.00 30.49
ATOM   1028  C   ASN  289     76.395  48.278  27.792  1.00 28.33
ATOM   1029  O   ASN  289     76.005  48.977  28.724  1.00 28.36
ATOM   1030  N   GLY  290     75.638  47.977  26.740  1.00 26.71
ATOM   1031  CA  GLY  290     74.286  48.487  26.606  1.00 23.27
ATOM   1032  C   GLY  290     73.233  47.852  27.484  1.00 22.93
ATOM   1033  O   GLY  290     72.063  48.219  27.399  1.00 23.84
ATOM   1034  N   GLY  291     73.620  46.905  28.330  1.00 21.30
ATOM   1035  CA  GLY  291     72.637  46.290  29.199  1.00 20.38
ATOM   1036  C   GLY  291     72.653  44.778  29.200  1.00 20.05
ATOM   1037  O   GLY  291     72.190  44.165  30.147  1.00 21.91
ATOM   1038  N   LEU  292     73.211  44.173  28.160  1.00 21.36
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ATOM  1039 CA  LEU  292    73.248 42.717 28.062 1.00 21.51
ATOM  1040 CB  LEU  292    73.319 42.280 26.593 1.00 18.52
ATOM  1041 CG  LEU  292    72.019 42.506 25.815 1.00 17.07
ATOM  1042 CD1 LEU  292    72.103 41.818 24.479 1.00 18.09
ATOM  1043 CD2 LEU  292    70.844 41.947 26.599 1.00 16.35
ATOM  1044 C`  LEU  292    74.347 42.046 28.872 1.00 22.17
ATOM  1045 O   LEU  292    74.176 40.923 29.352 1.00 21.91
ATOM  1046 N   GLY  293    75.479 42.724 29.011 1.00 23.76
ATOM  1047 CA  GLY  293    76.588 42.169 29.760 1.00 23.92
ATOM  1048 C   GLY  293    77.134 40.926 29.091 1.00 25.09
ATOM  1049 O   GLY  293    77.362 40.919 27.883 1.00 26.51
ATOM  1050 N   VAL  294    77.332 39.866 29.867 1.00 26.08
ATOM  1051 CA  VAL  294    77.854 38.618 29.329 1.00 26.34
ATOM  1052 CB  VAL  294    78.263 37.636 30.443 1.00 26.97
ATOM  1053 CG1 VAL  294    79.440 38.199 31.209 1.00 28.20
ATOM  1054 CG2 VAL  294    77.099 37.371 31.384 1.00 25.56
ATOM  1055 C   VAL  294    76.891 37.937 28.360 1.00 26.41
ATOM  1056 O   VAL  294    77.315 37.097 27.568 1.00 27.65
ATOM  1057 N   VAL  295    75.608 38.304 28.408 1.00 26.09
ATOM  1058 CA  VAL  295    74.606 37.740 27.499 1.00 26.65
ATOM  1059 CB  VAL  295    73.186 38.312 27.777 1.00 28.39
ATOM  1060 CG1 VAL  295    72.164 37.740 26.782 1.00 26.69
ATOM  1061 CG2 VAL  295    72.763 38.005 29.206 1.00 26.23
ATOM  1062 C   VAL  295    75.035 38.089 26.069 1.00 25.83
ATOM  1063 O   VAL  295    74.903 37.286 25.151 1.00 27.12
ATOM  1064 N   SER  296    75.609 39.275 25.908 1.00 24.95
ATOM  1065 CA  SER  296    76.097 39.725 24.619 1.00 26.17
ATOM  1066 CB  SER  296    76.665 41.132 24.742 1.00 25.82
ATOM  1067 OG  SER  296    77.253 41.554 23.525 1.00 26.64
ATOM  1068 C   SER  296    77.196 38.783 24.142 1.00 28.63
ATOM  1069 O   SER  296    77.241 38.420 22.963 1.00 29.19
ATOM  1070 N   ASP  297    78.118 38.443 25.046 1.00 29.69
ATOM  1071 CA  ASP  297    79.211 37.531 24.731 1.00 28.96
ATOM  1072 CB  ASP  297    80.058 37.234 25.973 1.00 31.82
ATOM  1073 CG  ASP  297    80.768 38.454 26.506 1.00 35.23
ATOM  1074 OD1 ASP  297    80.958 39.429 25.743 1.00 35.71
ATOM  1075 OD2 ASP  297    81.140 38.430 27.698 1.00 37.68
ATOM  1076 C   ASP  297    78.605 36.227 24.247 1.00 27.63
ATOM  1077 O   ASP  297    79.048 35.666 23.248 1.00 29.88
ATOM  1078 N   ALA  298    77.581 35.762 24.952 1.00 25.15
ATOM  1079 CA  ALA  298    76.909 34.527 24.592 1.00 24.49
ATOM  1080 CB  ALA  298    75.811 34.224 25.594 1.00 21.91
ATOM  1081 C   ALA  298    76.343 34.569 23.158 1.00 24.93
ATOM  1082 O   ALA  298    76.589 33.654 22.357 1.00 24.83
ATOM  1083 N   ILE  299    75.632 35.647 22.814 1.00 24.70
ATOM  1084 CA  ILE  299    75.041 35.756 21.480 1.00 22.49
ATOM  1085 CB  ILE  299    74.057 36.950 21.351 1.00 21.96
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ATOM   1086  CG2 ILE   299      73.338  36.876  20.005  1.00 19.17
ATOM   1087  CG1 ILE   299      72.994  36.876  22.459  1.00 21.16
ATOM   1088  CD1 ILE   299      72.363  38.228  22.853  1.00 22.04
ATOM   1089  C   ILE   299      76.127  35.829  20.428  1.00 22.33
ATOM   1090  O   ILE   299      75.995  35.234  19.367  1.00 24.80
ATOM   1091  N   PHE   300      77.209  36.538  20.724  1.00 21.92
ATOM   1092  CA  PHE   300      78.322  36.641  19.785  1.00 23.08
ATOM   1093  CB  PHE   300      79.385  37.636  20.278  1.00 24.08
ATOM   1094  CG  PHE   300      79.249  39.017  19.686  1.00 24.18
ATOM   1095  CD1 PHE   300      78.494  39.991  20.325  1.00 22.64
ATOM   1096  CD2 PHE   300      79.857  39.331  18.471  1.00 23.76
ATOM   1097  CE1 PHE   300      78.347  41.253  19.770  1.00 22.38
ATOM   1098  CE2 PHE   300      79.715  40.596  17.904  1.00 23.21
ATOM   1099  CZ  PHE   300      78.957  41.558  18.554  1.00 22.46
ATOM   1100  C   PHE   300      78.948  35.274  19.561  1.00 23.06
ATOM   1101  O   PHE   300      79.264  34.913  18.426  1.00 23.97
ATOM   1102  N   GLU   301      79.113  34.506  20.636  1.00 23.75
ATOM   1103  CA  GLU   301      79.694  33.169  20.525  1.00 24.16
ATOM   1104  CB  GLU   301      79.884  32.545  21.902  1.00 23.03
ATOM   1105  C   GLU   301      78.776  32.302  19.672  1.00 23.62
ATOM   1106  O   GLU   301      79.240  31.591  18.777  1.00 25.11
ATOM   1107  N   LEU   302      77.472  32.394  19.926  1.00 23.12
ATOM   1108  CA  LEU   302      76.495  31.624  19.166  1.00 23.56
ATOM   1109  CB  LEU   302      75.082  31.865  19.701  1.00 21.75
ATOM   1110  CG  LEU   302      73.953  31.120  18.979  1.00 22.61
ATOM   1111  CD1 LEU   302      74.084  29.612  19.193  1.00 22.31
ATOM   1112  CD2 LEU   302      72.611  31.604  19.485  1.00 19.27
ATOM   1113  C   LEU   302      76.588  32.011  17.687  1.00 24.41
ATOM   1114  O   LEU   302      76.670  31.140  16.814  1.00 24.63
ATOM   1115  N   GLY   303      76.651  33.316  17.425  1.00 25.69
ATOM   1116  CA  GLY   303      76.746  33.816  16.062  1.00 25.87
ATOM   1117  C   GLY   303      77.975  33.288  15.338  1.00 28.63
ATOM   1118  O   GLY   303      77.893  32.895  14.170  1.00 28.30
ATOM   1119  N   LYS   304      79.116  33.279  16.023  1.00 29.53
ATOM   1120  CA  LYS   304      80.360  32.791  15.437  1.00 31.18
ATOM   1121  CB  LYS   304      81.529  32.931  16.418  1.00 34.79
ATOM   1122  CG  LYS   304      82.157  34.307  16.506  1.00 40.28
ATOM   1123  CD  LYS   304      83.441  34.262  17.332  1.00 44.37
ATOM   1124  CE  LYS   304      83.174  33.814  18.775  1.00 47.63
ATOM   1125  NZ  LYS   304      82.459  34.847  19.592  1.00 48.83
ATOM   1126  C   LYS   304      80.245  31.328  15.042  1.00 30.87
ATOM   1127  O   LYS   304      80.632  30.944  13.932  1.00 29.53
ATOM   1128  N   SER   305      79.720  30.518  15.961  1.00 30.46
ATOM   1129  CA  SER   305      79.566  29.086  15.731  1.00 31.09
ATOM   1130  CB  SER   305      79.243  28.370  17.041  1.00 29.83
ATOM   1131  OG  SER   305      77.990  28.783  17.550  1.00 34.66
ATOM   1132  C   SER   305      78.532  28.732  14.653  1.00 31.06
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ATOM   1133 O   SER  305    78.745 27.799 13.872 1.00 31.84
ATOM   1134 N   LEU  306    77.436 29.491 14.594 1.00 29.43
ATOM   1135 CA  LEU  306    76.378 29.258 13.611 1.00 28.39
ATOM   1136 CB  LEU  306    75.121 30.055 13.962 1.00 26.05
ATOM   1137 CG  LEU  306    74.306 29.573 15.157 1.00 26.33
ATOM   1138 CD1 LEU  306    73.061 30.430 15.285 1.00 26.22
ATOM   1139 CD2 LEU  306    73.924 28.110 14.985 1.00 25.86
ATOM   1140 C   LEU  306    76.754 29.529 12.157 1.00 28.66
ATOM   1141 O   LEU  306    76.116 29.001 11.253 1.00 28.58
ATOM   1142 N   SER  307    77.786 30.338 11.931 1.00 29.72
ATOM   1143 CA  SER  307    78.224 30.667 10.577 1.00 31.19
ATOM   1144 CB  SER  307    79.466 31.556 10.617 1.00 30.15
ATOM   1145 OG  SER  307    79.226 32.710 11.396 1.00 35.19
ATOM   1146 C   SER  307    78.531 29.412  9.777 1.00 32.75
ATOM   1147 O   SER  307    78.110 29.283  8.621 1.00 33.09
ATOM   1148 N   ALA  308    79.248 28.482 10.407 1.00 33.36
ATOM   1149 CA  ALA  308    79.626 27.223  9.769 1.00 34.50
ATOM   1150 CB  ALA  308    80.636 26.473 10.637 1.00 33.55
ATOM   1151 C   ALA  308    78.417 26.328  9.466 1.00 35.00
ATOM   1152 O   ALA  308    78.469 25.501  8.550 1.00 37.10
ATOM   1153 N   PHE  309    77.335 26.496 10.226 1.00 32.76
ATOM   1154 CA  PHE  309    76.134 25.698 10.028 1.00 31.73
ATOM   1155 CB  PHE  309    75.214 25.818 11.232 1.00 30.04
ATOM   1156 CG  PHE  309    75.705 25.091 12.438 1.00 31.19
ATOM   1157 CD1 PHE  309    74.973 24.048 12.975 1.00 31.61
ATOM   1158 CD2 PHE  309    76.884 25.459 13.054 1.00 31.92
ATOM   1159 CE1 PHE  309    75.400 23.391 14.110 1.00 31.22
ATOM   1160 CE2 PHE  309    77.320 24.807 14.194 1.00 31.01
ATOM   1161 CZ  PHE  309    76.577 23.771 14.720 1.00 30.47
ATOM   1162 C   PHE  309    75.364 26.050  8.753 1.00 31.53
ATOM   1163 O   PHE  309    74.516 25.269  8.310 1.00 31.28
ATOM   1164 N   ASN  310    75.661 27.220  8.181 1.00 31.12
ATOM   1165 CA  ASN  310    75.020 27.711  6.957 1.00 30.34
ATOM   1166 CB  ASN  310    75.636 27.036  5.719 1.00 31.63
ATOM   1167 C   ASN  310    73.511 27.492  7.003 1.00 29.40
ATOM   1168 O   ASN  310    72.939 26.791  6.156 1.00 29.15
ATOM   1169 N   LEU  311    72.875 28.055  8.026 1.00 27.60
ATOM   1170 CA  LEU  311    71.435 27.907  8.205 1.00 28.23
ATOM   1171 CB  LEU  311    71.021 28.313  9.621 1.00 27.41
ATOM   1172 CG  LEU  311    71.603 27.558 10.822 1.00 26.80
ATOM   1173 CD1 LEU  311    70.949 28.078 12.112 1.00 25.05
ATOM   1174 CD2 LEU  311    71.360 26.062 10.662 1.00 24.72
ATOM   1175 C   LEU  311    70.628 28.719  7.192 1.00 29.01
ATOM   1176 O   LEU  311    71.040 29.808  6.782 1.00 30.66
ATOM   1177 N   ASP  312    69.503 28.168  6.748 1.00 26.30
ATOM   1178 CA  ASP  312    68.675 28.894  5.817 1.00 25.13
ATOM   1179 CB  ASP  312    68.391 28.067  4.539 1.00 23.90
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ATOM  1180  CG  ASP  312     67.438  26.890   4.754  1.00 21.34
ATOM  1181  OD1 ASP  312     66.959  26.631   5.868  1.00 22.47
ATOM  1182  OD2 ASP  312     67.154  26.206   3.758  1.00 22.18
ATOM  1183  C   ASP  312     67.419  29.379   6.542  1.00 24.49
ATOM  1184  O   ASP  312     67.221  29.056   7.725  1.00 24.01
ATOM  1185  N˙  ASP  313     66.587  30.153   5.845  1.00 23.40
ATOM  1186  CA  ASP  313     65.363  30.697   6.421  1.00 22.63
ATOM  1187  CB  ASP  313     64.557  31.486   5.385  1.00 24.99
ATOM  1188  CG  ASP  313     65.224  32.799   4.994  1.00 28.02
ATOM  1189  OD1 ASP  313     66.036  33.334   5.778  1.00 30.34
ATOM  1190  OD2 ASP  313     64.936  33.306   3.897  1.00 30.41
ATOM  1191  C   ASP  313     64.480  29.650   7.053  1.00 21.47
ATOM  1192  O   ASP  313     63.853  29.917   8.082  1.00 21.76
ATOM  1193  N   THR  314     64.407  28.474   6.435  1.00 19.16
ATOM  1194  CA  THR  314     63.580  27.386   6.966  1.00 18.79
ATOM  1195  CB  THR  314     63.398  26.240   5.913  1.00 19.68
ATOM  1196  OG1 THR  314     62.743  26.758   4.747  1.00 20.56
ATOM  1197  CG2 THR  314     62.558  25.112   6.482  1.00 18.84
ATOM  1198  C   THR  314     64.133  26.818   8.293  1.00 15.38
ATOM  1199  O   THR  314     63.383  26.538   9.223  1.00 14.08
ATOM  1200  N   GLU  315     65.445  26.656   8.376  1.00 15.16
ATOM  1201  CA  GLU  315     66.051  26.126   9.593  1.00 16.78
ATOM  1202  CB  GLU  315     67.513  25.785   9.340  1.00 14.29
ATOM  1203  CG  GLU  315     67.611  24.483   8.579  1.00 15.13
ATOM  1204  CD  GLU  315     68.910  24.291   7.872  1.00 15.90
ATOM  1205  OE1 GLU  315     69.625  25.285   7.639  1.00 19.80
ATOM  1206  OE2 GLU  315     69.211  23.129   7.527  1.00 19.34
ATOM  1207  C   GLU  315     65.872  27.119  10.736  1.00 17.27
ATOM  1208  O   GLU  315     65.457  26.742  11.836  1.00 17.46
ATOM  1209  N   VAL  316     66.081  28.399  10.440  1.00 17.12
ATOM  1210  CA  VAL  316     65.897  29.441  11.446  1.00 16.92
ATOM  1211  CB  VAL  316     66.336  30.828  10.918  1.00 15.89
ATOM  1212  CG1 VAL  316     66.062  31.921  11.962  1.00 14.60
ATOM  1213  CG2 VAL  316     67.811  30.785  10.579  1.00 15.95
ATOM  1214  C   VAL  316     64.430  29.472  11.869  1.00 17.32
ATOM  1215  O   VAL  316     64.131  29.582  13.055  1.00 18.11
ATOM  1216  N   ALA  317     63.515  29.324  10.905  1.00 17.42
ATOM  1217  CA  ALA  317     62.076  29.342  11.195  1.00 16.21
ATOM  1218  CB  ALA  317     61.262  29.321   9.910  1.00 14.63
ATOM  1219  C   ALA  317     61.656  28.181  12.079  1.00 16.84
ATOM  1220  O   ALA  317     60.904  28.359  13.036  1.00 16.08
ATOM  1221  N   LEU  318     62.146  26.990  11.759  1.00 17.27
ATOM  1222  CA  LEU  318     61.783  25.804  12.526  1.00 17.88
ATOM  1223  CB  LEU  318     62.141  24.525  11.748  1.00 17.58
ATOM  1224  CG  LEU  318     61.331  24.333  10.439  1.00 16.87
ATOM  1225  CD1 LEU  318     61.837  23.155   9.658  1.00 15.79
ATOM  1226  CD2 LEU  318     59.860  24.149  10.728  1.00 14.08
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ATOM   1227 C   LEU   318    62.394 25.852 13.932 1.00 18.20
ATOM   1228 O   LEU   318    61.733 25.495 14.910 1.00 18.71
ATOM   1229 N   LEU   319    63.614 26.380 14.034 1.00 17.73
ATOM   1230 CA  LEU   319    64.288 26.531 15.321 1.00 16.57
ATOM   1231 CB  LEU   319    65.689 27.105 15.107 1.00 18.81
ATOM   1232 CG  LEU   319    66.733 27.223 16.224 1.00 21.77
ATOM   1233 CD1 LEU   319    66.767 25.994 17.117 1.00 23.03
ATOM   1234 CD2 LEU   319    68.076 27.421 15.554 1.00 20.86
ATOM   1235 C   LEU   319    63.433 27.471 16.160 1.00 16.07
ATOM   1236 O   LEU   319    63.134 27.183 17.319 1.00 16.40
ATOM   1237 N   GLN   320    62.948 28.546 15.545 1.00 13.91
ATOM   1238 CA  GLN   320    62.101 29.490 16.253 1.00 13.86
ATOM   1239 CB  GLN   320    61.782 30.697 15.373 1.00 13.26
ATOM   1240 CG  GLN   320    62.994 31.553 15.080 1.00 12.17
ATOM   1241 CD  GLN   320    62.691 32.802 14.253 1.00 13.98
ATOM   1242 OE1 GLN   320    63.597 33.568 13.950 1.00 15.61
ATOM   1243 NE2 GLN   320    61.436 32.993 13.862 1.00 13.85
ATOM   1244 C   GLN   320    60.813 28.832 16.746 1.00 14.52
ATOM   1245 O   GLN   320    60.367 29.087 17.864 1.00 15.12
ATOM   1246 N   ALA   321    60.211 27.982 15.924 1.00 14.21
ATOM   1247 CA  ALA   321    58.976 27.298 16.309 1.00 15.04
ATOM   1248 CB  ALA   321    58.408 26.519 15.115 1.00 13.84
ATOM   1249 C   ALA   321    59.217 26.349 17.487 1.00 15.98
ATOM   1250 O   ALA   321    58.358 26.197 18.355 1.00 15.12
ATOM   1251 N   VAL   322    60.373 25.687 17.488 1.00 16.63
ATOM   1252 CA  VAL   322    60.720 24.757 18.557 1.00 18.74
ATOM   1253 CB  VAL   322    62.012 23.943 18.231 1.00 19.42
ATOM   1254 CG1 VAL   322    62.493 23.154 19.455 1.00 19.45
ATOM   1255 CG2 VAL   322    61.745 22.986 17.083 1.00 19.05
ATOM   1256 C   VAL   322    60.910 25.556 19.833 1.00 18.42
ATOM   1257 O   VAL   322    60.421 25.164 20.886 1.00 19.46
ATOM   1258 N   LEU   323    61.607 26.685 19.735 1.00 18.65
ATOM   1259 CA  LEU   323    61.836 27.543 20.894 1.00 18.49
ATOM   1260 CB  LEU   323    62.710 28.740 20.508 1.00 18.36
ATOM   1261 CG  LEU   323    64.179 28.449 20.186 1.00 18.13
ATOM   1262 CD1 LEU   323    64.829 29.669 19.585 1.00 17.37
ATOM   1263 CD2 LEU   323    64.923 27.999 21.447 1.00 17.27
ATOM   1264 C   LEU   323    60.499 28.029 21.454 1.00 18.38
ATOM   1265 O   LEU   323    60.275 28.008 22.663 1.00 18.81
ATOM   1266 N   LEU   324    59.595 28.406 20.557 1.00 18.67
ATOM   1267 CA  LEU   324    58.275 28.897 20.924 1.00 19.02
ATOM   1268 CB  LEU   324    57.564 29.467 19.685 1.00 17.78
ATOM   1269 CG  LEU   324    56.095 29.891 19.838 1.00 17.59
ATOM   1270 CD1 LEU   324    55.983 31.123 20.709 1.00 18.15
ATOM   1271 CD2 LEU   324    55.489 30.180 18.476 1.00 16.43
ATOM   1272 C   LEU   324    57.354 27.884 21.610 1.00 19.62
ATOM   1273 O   LEU   324    56.735 28.185 22.633 1.00 19.40
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ATOM	1274	N	MET	325	57.224	26.701	21.029	1.00	21.14
ATOM	1275	CA	MET	325	56.330	25.680	21.585	1.00	24.06
ATOM	1276	CB	MET	325	55.857	24.738	20.473	1.00	24.68
ATOM	1277	CG	MET	325	55.169	25.444	19.303	1.00	24.49
ATOM	1278	SD	MET	325	53.759	26.457	19.820	1.00	26.18
ATOM	1279	CE	MET	325	52.609	25.252	20.373	1.00	24.03
ATOM	1280	C	MET	325	56.996	24.887	22.705	1.00	26.15
ATOM	1281	O	MET	325	57.021	23.664	22.693	1.00	25.68
ATOM	1282	N	SER	326	57.555	25.593	23.671	1.00	29.34
ATOM	1283	CA	SER	326	58.232	24.938	24.774	1.00	32.40
ATOM	1284	CB	SER	326	59.512	25.701	25.112	1.00	32.12
ATOM	1285	OG	SER	326	60.127	25.173	26.272	1.00	36.86
ATOM	1286	C	SER	326	57.317	24.831	25.996	1.00	34.04
ATOM	1287	O	SER	326	56.532	25.741	26.280	1.00	33.24
ATOM	1288	N	THR	327	57.366	23.687	26.674	1.00	35.62
ATOM	1289	CA	THR	327	56.560	23.486	27.867	1.00	36.88
ATOM	1290	CB	THR	327	55.938	22.085	27.907	1.00	36.58
ATOM	1291	OG1	THR	327	56.953	21.094	27.714	1.00	38.58
ATOM	1292	CG2	THR	327	54.883	21.938	26.826	1.00	37.73
ATOM	1293	C	THR	327	57.378	23.733	29.135	1.00	38.77
ATOM	1294	O	THR	327	56.921	23.438	30.240	1.00	39.53
ATOM	1295	N	ASP	328	58.593	24.260	28.972	1.00	41.25
ATOM	1296	CA	ASP	328	59.473	24.573	30.099	1.00	43.20
ATOM	1297	CB	ASP	328	60.940	24.698	29.655	1.00	46.47
ATOM	1298	CG	ASP	328	61.618	23.346	29.439	1.00	51.94
ATOM	1299	OD1	ASP	328	62.547	23.278	28.601	1.00	55.43
ATOM	1300	OD2	ASP	328	61.251	22.354	30.111	1.00	54.77
ATOM	1301	C	ASP	328	59.001	25.905	30.653	1.00	43.79
ATOM	1302	O	ASP	328	59.755	26.877	30.709	1.00	45.91
ATOM	1303	N	ARG	329	57.724	25.967	30.995	1.00	43.55
ATOM	1304	CA	ARG	329	57.143	27.178	31.542	1.00	43.04
ATOM	1305	CB	ARG	329	56.398	27.997	30.482	1.00	43.87
ATOM	1306	CG	ARG	329	57.258	28.740	29.504	1.00	40.87
ATOM	1307	CD	ARG	329	57.545	27.886	28.314	1.00	39.52
ATOM	1308	NE	ARG	329	58.301	28.643	27.341	1.00	38.90
ATOM	1309	CZ	ARG	329	59.624	28.708	27.313	1.00	40.59
ATOM	1310	NH1	ARG	329	60.359	28.052	28.196	1.00	42.41
ATOM	1311	NH2	ARG	329	60.210	29.466	26.413	1.00	41.87
ATOM	1312	C	ARG	329	56.152	26.817	32.609	1.00	43.00
ATOM	1313	O	ARG	329	55.600	25.716	32.628	1.00	43.66
ATOM	1314	N	SER	330	55.886	27.797	33.456	1.00	41.58
ATOM	1315	CA	SER	330	54.953	27.641	34.538	1.00	40.11
ATOM	1316	CB	SER	330	55.491	28.362	35.777	1.00	40.38
ATOM	1317	C	SER	330	53.602	28.223	34.103	1.00	38.99
ATOM	1318	O	SER	330	53.553	29.172	33.320	1.00	39.22
ATOM	1319	N	GLY	331	52.517	27.581	34.529	1.00	37.52
ATOM	1320	CA	GLY	331	51.176	28.063	34.232	1.00	35.64

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ATOM   1321 C   GLY  331    50.493 27.782 32.906 1.00 35.14
ATOM   1322 O   GLY  331    49.439 28.363 32.640 1.00 34.48
ATOM   1323 N   LEU  332    51.059 26.925 32.066 1.00 34.54
ATOM   1324 CA  LEU  332    50.424 26.637 30.780 1.00 34.59
ATOM   1325 CB  LEU  332    51.394 25.942 29.828 1.00 33.09
ATOM   1326 CG  LEU  332    52.532 26.765 29.236 1.00 32.72
ATOM   1327 CD1 LEU  332    53.473 25.834 28.497 1.00 30.29
ATOM   1328 CD2 LEU  332    51.987 27.844 28.313 1.00 29.20
ATOM   1329 C   LEU  332    49.191 25.763 30.969 1.00 35.14
ATOM   1330 O   LEU  332    49.178 24.874 31.811 1.00 35.96
ATOM   1331 N   LEU  333    48.153 26.076 30.204 1.00 35.65
ATOM   1332 CA  LEU  333    46.898 25.345 30.215 1.00 37.97
ATOM   1333 CB  LEU  333    45.743 26.271 29.796 1.00 40.71
ATOM   1334 CG  LEU  333    45.389 27.483 30.670 1.00 43.46
ATOM   1335 CD1 LEU  333    44.713 28.620 29.882 1.00 42.72
ATOM   1336 CD2 LEU  333    44.487 27.021 31.806 1.00 45.25
ATOM   1337 C   LEU  333    46.952 24.115 29.300 1.00 37.78
ATOM   1338 O   LEU  333    46.695 22.991 29.720 1.00 37.65
ATOM   1339 N   CYA  334    47.361 24.323 28.060 1.00 38.65
ATOM   1340 CA  CYA  334    47.413 23.249 27.073 1.00 40.91
ATOM   1341 CB  CYA  334    46.936 23.788 25.721 1.00 47.35
ATOM   1342 SG  CYA  334    45.406 24.693 25.867 1.00 52.24
ATOM   1343 AS  CYA  334    44.066 22.890 25.562 1.00 70.72
ATOM   1344 C   CYA  334    48.778 22.588 26.901 1.00 39.85
ATOM   1345 O   CYA  334    49.287 22.473 25.775 1.00 39.54
ATOM   1346 N   VAL  335    49.329 22.078 27.997 1.00 37.67
ATOM   1347 CA  VAL  335    50.641 21.432 27.967 1.00 36.07
ATOM   1348 CB  VAL  335    51.019 20.905 29.384 1.00 33.70
ATOM   1349 CG1 VAL  335    52.434 20.332 29.401 1.00 33.70
ATOM   1350 CG2 VAL  335    50.913 22.028 30.387 1.00 31.84
ATOM   1351 C   VAL  335    50.734 20.334 26.885 1.00 36.09
ATOM   1352 O   VAL  335    51.662 20.335 26.064 1.00 34.41
ATOM   1353 N   ASP  336    49.747 19.444 26.833 1.00 35.95
ATOM   1354 CA  ASP  336    49.748 18.372 25.844 1.00 36.34
ATOM   1355 CB  ASP  336    48.591 17.394 26.091 1.00 41.36
ATOM   1356 CG  ASP  336    48.613 16.206 25.129 1.00 46.23
ATOM   1357 OD1 ASP  336    47.615 16.021 24.392 1.00 49.55
ATOM   1358 OD2 ASP  336    49.639 15.470 25.097 1.00 48.07
ATOM   1359 C   ASP  336    49.727 18.846 24.390 1.00 33.05
ATOM   1360 O   ASP  336    50.527 18.377 23.573 1.00 32.33
ATOM   1361 N   LYS  337    48.794 19.743 24.076 1.00 29.57
ATOM   1362 CA  LYS  337    48.661 20.286 22.723 1.00 27.76
ATOM   1363 CB  LYS  337    47.520 21.313 22.689 1.00 27.09
ATOM   1364 C   LYS  337    49.988 20.941 22.286 1.00 27.64
ATOM   1365 O   LYS  337    50.472 20.713 21.173 1.00 26.09
ATOM   1366 N   ILE  338    50.597 21.688 23.208 1.00 25.90
ATOM   1367 CA  ILE  338    51.852 22.394 22.971 1.00 24.21
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ATOM  1368  CB  ILE  338    52.128  23.391  24.122  1.00 23.30
ATOM  1369  CG2 ILE  338    53.500  24.048  23.958  1.00 21.75
ATOM  1370  CG1 ILE  338    51.014  24.448  24.155  1.00 21.19
ATOM  1371  CD1 ILE  338    51.055  25.393  25.361  1.00 21.39
ATOM  1372  C   ILE  338    53.041  21.451  22.782  1.00 25.55
ATOM  1373  O   ILE  338    53.861  21.640  21.875  1.00 24.74
ATOM  1374  N   GLU  339    53.124  20.421  23.622  1.00 27.43
ATOM  1375  CA  GLU  339    54.220  19.448  23.536  1.00 27.60
ATOM  1376  CB  GLU  339    54.201  18.512  24.755  1.00 27.21
ATOM  1377  C   GLU  339    54.112  18.650  22.236  1.00 26.85
ATOM  1378  O   GLU  339    55.119  18.385  21.581  1.00 26.71
ATOM  1379  N   LYS  340    52.888  18.276  21.872  1.00 27.04
ATOM  1380  CA  LYS  340    52.663  17.515  20.654  1.00 28.19
ATOM  1381  CB  LYS  340    51.210  17.008  20.609  1.00 28.67
ATOM  1382  C   LYS  340    53.002  18.402  19.439  1.00 27.96
ATOM  1383  O   LYS  340    53.558  17.934  18.436  1.00 27.48
ATOM  1384  N   SER  341    52.746  19.700  19.567  1.00 28.32
ATOM  1385  CA  SER  341    53.058  20.662  18.514  1.00 28.02
ATOM  1386  CB  SER  341    52.457  22.022  18.867  1.00 31.25
ATOM  1387  OG  SER  341    52.880  23.029  17.965  1.00 37.69
ATOM  1388  C   SER  341    54.578  20.773  18.350  1.00 26.01
ATOM  1389  O   SER  341    55.096  20.717  17.234  1.00 25.06
ATOM  1390  N   GLN  342    55.297  20.899  19.462  1.00 25.71
ATOM  1391  CA  GLN  342    56.750  20.993  19.398  1.00 26.39
ATOM  1392  CB  GLN  342    57.356  21.254  20.777  1.00 24.17
ATOM  1393  CG  GLN  342    58.834  21.590  20.703  1.00 25.09
ATOM  1394  CD  GLN  342    59.476  21.677  22.057  1.00 26.93
ATOM  1395  OE1 GLN  342    59.479  20.704  22.810  1.00 27.77
ATOM  1396  NE2 GLN  342    60.022  22.839  22.386  1.00 24.61
ATOM  1397  C   GLN  342    57.354  19.715  18.806  1.00 25.69
ATOM  1398  O   GLN  342    58.356  19.771  18.075  1.00 24.99
ATOM  1399  N   GLU  343    56.753  18.569  19.127  1.00 25.00
ATOM  1400  CA  GLU  343    57.222  17.280  18.610  1.00 25.34
ATOM  1401  CB  GLU  343    56.411  16.118  19.245  1.00 25.90
ATOM  1402  C   GLU  343    57.089  17.276  17.076  1.00 24.32
ATOM  1403  O   GLU  343    58.021  16.891  16.365  1.00 23.99
ATOM  1404  N   ALA  344    55.961  17.789  16.587  1.00 23.56
ATOM  1405  CA  ALA  344    55.701  17.875  15.153  1.00 22.85
ATOM  1406  CB  ALA  344    54.320  18.451  14.917  1.00 22.64
ATOM  1407  C   ALA  344    56.768  18.743  14.489  1.00 22.77
ATOM  1408  O   ALA  344    57.355  18.360  13.477  1.00 22.08
ATOM  1409  N   TYR  345    57.057  19.893  15.092  1.00 21.89
ATOM  1410  CA  TYR  345    58.075  20.792  14.550  1.00 21.18
ATOM  1411  CB  TYR  345    58.108  22.119  15.313  1.00 20.27
ATOM  1412  CG  TYR  345    57.048  23.078  14.856  1.00 17.45
ATOM  1413  CD1 TYR  345    56.001  23.431  15.698  1.00 17.99
ATOM  1414  CE1 TYR  345    54.992  24.253  15.270  1.00 19.97
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ATOM   1415  CD2 TYR  345      57.063  23.589  13.562  1.00 19.11
ATOM   1416  CE2 TYR  345      56.055  24.424  13.116  1.00 19.14
ATOM   1417  CZ  TYR  345      55.017  24.749  13.972  1.00 20.78
ATOM   1418  OH  TYR  345      53.983  25.539  13.530  1.00 20.70
ATOM   1419  C   TYR  345      59.454  20.167  14.583  1.00 20.96
ATOM   1420  O   TYR  345      60.221  20.314  13.632  1.00 22.29
ATOM   1421  N   LEU  346      59.778  19.480  15.677  1.00 20.82
ATOM   1422  CA  LEU  346      61.079  18.838  15.817  1.00 20.18
ATOM   1423  CB  LEU  346      61.216  18.203  17.205  1.00 21.04
ATOM   1424  CG  LEU  346      61.606  19.158  18.335  1.00 21.25
ATOM   1425  CD1 LEU  346      61.226  18.595  19.685  1.00 20.95
ATOM   1426  CD2 LEU  346      63.099  19.438  18.267  1.00 19.90
ATOM   1427  C   LEU  346      61.317  17.806  14.716  1.00 20.19
ATOM   1428  O   LEU  346      62.407  17.755  14.142  1.00 20.69
ATOM   1429  N   LEU  347      60.290  17.016  14.390  1.00 22.00
ATOM   1430  CA  LEU  347      60.406  15.994  13.344  1.00 21.81
ATOM   1431  CB  LEU  347      59.199  15.051  13.366  1.00 24.03
ATOM   1432  CG  LEU  347      59.301  13.805  14.250  1.00 26.28
ATOM   1433  CD1 LEU  347      57.964  13.072  14.277  1.00 27.79
ATOM   1434  CD2 LEU  347      60.409  12.889  13.728  1.00 24.78
ATOM   1435  C   LEU  347      60.544  16.623  11.966  1.00 20.50
ATOM   1436  O   LEU  347      61.351  16.179  11.143  1.00 21.39
ATOM   1437  N   ALA  348      59.767  17.674  11.727  1.00 20.84
ATOM   1438  CA  ALA  348      59.788  18.381  10.456  1.00 18.12
ATOM   1439  CB  ALA  348      58.729  19.480  10.457  1.00 18.49
ATOM   1440  C   ALA  348      61.168  18.963  10.269  1.00 17.53
ATOM   1441  O   ALA  348      61.785  18.781   9.228  1.00 18.78
ATOM   1442  N   PHE  349      61.677  19.569  11.338  1.00 19.55
ATOM   1443  CA  PHE  349      63.001  20.196  11.389  1.00 19.84
ATOM   1444  CB  PHE  349      63.188  20.823  12.786  1.00 18.68
ATOM   1445  CG  PHE  349      64.380  21.758  12.917  1.00 19.12
ATOM   1446  CD1 PHE  349      65.234  22.008  11.851  1.00 19.95
ATOM   1447  CD2 PHE  349      64.618  22.420  14.126  1.00 20.06
ATOM   1448  CE1 PHE  349      66.294  22.905  11.971  1.00 18.99
ATOM   1449  CE2 PHE  349      65.674  23.317  14.261  1.00 16.79
ATOM   1450  CZ  PHE  349      66.516  23.562  13.184  1.00 18.91
ATOM   1451  C   PHE  349      64.108  19.170  11.103  1.00 20.44
ATOM   1452  O   PHE  349      64.980  19.401  10.260  1.00 19.83
ATOM   1453  N   GLU  350      64.064  18.032  11.794  1.00 23.59
ATOM   1454  CA  GLU  350      65.077  16.995  11.610  1.00 23.46
ATOM   1455  CB  GLU  350      64.830  15.845  12.584  1.00 25.26
ATOM   1456  CG  GLU  350      65.694  14.644  12.288  1.00 31.98
ATOM   1457  CD  GLU  350      65.526  13.482  13.257  1.00 35.49
ATOM   1458  OE1 GLU  350      66.560  12.853  13.555  1.00 40.26
ATOM   1459  OE2 GLU  350      64.380  13.173  13.689  1.00 36.23
ATOM   1460  C   GLU  350      65.083  16.489  10.165  1.00 21.12
ATOM   1461  O   GLU  350      66.133  16.384   9.526  1.00 19.81
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ATOM	1462	N	HIS	351	63.888	16.234	9.651	1.00	21.98
ATOM	1463	CA	HIS	351	63.694	15.751	8.292	1.00	21.31
ATOM	1464	CB	HIS	351	62.238	15.321	8.107	1.00	21.76
ATOM	1465	CG	HIS	351	61.839	14.160	8.967	1.00	22.08
ATOM	1466	CD2	HIS	351	62.578	13.317	9.728	1.00	22.65
ATOM	1467	ND1	HIS	351	60.532	13.751	9.115	1.00	22.37
ATOM	1468	CE1	HIS	351	60.478	12.716	9.930	1.00	21.44
ATOM	1469	NE2	HIS	351	61.705	12.429	10.314	1.00	20.85
ATOM	1470	C	HIS	351	64.117	16.815	7.275	1.00	21.18
ATOM	1471	O	HIS	351	64.683	16.489	6.231	1.00	22.65
ATOM	1472	N	TYR	352	63.915	18.088	7.602	1.00	19.79
ATOM	1473	CA	TYR	352	64.327	19.146	6.697	1.00	18.72
ATOM	1474	CB	TYR	352	63.768	20.502	7.122	1.00	19.55
ATOM	1475	CG	TYR	352	64.140	21.580	6.137	1.00	19.27
ATOM	1476	CD1	TYR	352	63.556	21.623	4.867	1.00	19.29
ATOM	1477	CE1	TYR	352	63.961	22.555	3.927	1.00	17.55
ATOM	1478	CD2	TYR	352	65.132	22.507	6.438	1.00	18.91
ATOM	1479	CE2	TYR	352	65.545	23.443	5.503	1.00	17.30
ATOM	1480	CZ	TYR	352	64.954	23.459	4.256	1.00	18.41
ATOM	1481	OH	TYR	352	65.355	24.384	3.334	1.00	19.40
ATOM	1482	C	TYR	352	65.849	19.182	6.687	1.00	19.31
ATOM	1483	O	TYR	352	66.479	19.333	5.639	1.00	20.25
ATOM	1484	N	VAL	353	66.446	19.017	7.858	1.00	21.25
ATOM	1485	CA	VAL	353	67.899	18.993	7.960	1.00	22.03
ATOM	1486	CB	VAL	353	68.348	18.880	9.450	1.00	22.60
ATOM	1487	CG1	VAL	353	69.843	18.635	9.550	1.00	20.34
ATOM	1488	CG2	VAL	353	67.997	20.167	10.183	1.00	22.61
ATOM	1489	C	VAL	353	68.442	17.827	7.108	1.00	22.74
ATOM	1490	O	VAL	353	69.448	17.985	6.398	1.00	23.44
ATOM	1491	N	ASN	354	67.773	16.674	7.165	1.00	22.30
ATOM	1492	CA	ASN	354	68.185	15.508	6.373	1.00	23.56
ATOM	1493	CB	ASN	354	67.241	14.320	6.603	1.00	22.26
ATOM	1494	CG	ASN	354	67.374	13.715	7.981	1.00	23.06
ATOM	1495	OD1	ASN	354	68.406	13.843	8.628	1.00	25.79
ATOM	1496	ND2	ASN	354	66.327	13.044	8.435	1.00	21.07
ATOM	1497	C	ASN	354	68.134	15.877	4.888	1.00	25.10
ATOM	1498	O	ASN	354	69.024	15.534	4.111	1.00	26.70
ATOM	1499	N	HIS	355	67.067	16.568	4.503	1.00	24.50
ATOM	1500	CA	HIS	355	66.881	16.986	3.123	1.00	24.46
ATOM	1501	CB	HIS	355	65.557	17.750	2.969	1.00	26.07
ATOM	1502	CG	HIS	355	65.365	18.337	1.604	1.00	28.28
ATOM	1503	CD2	HIS	355	65.918	19.422	1.018	1.00	28.10
ATOM	1504	ND1	HIS	355	64.600	17.724	0.632	1.00	26.32
ATOM	1505	CE1	HIS	355	64.706	18.407	-0.499	1.00	27.71
ATOM	1506	NE2	HIS	355	65.502	19.435	-0.288	1.00	27.79
ATOM	1507	C	HIS	355	68.022	17.857	2.624	1.00	24.07
ATOM	1508	O	HIS	355	68.460	17.729	1.484	1.00	23.54

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ATOM   1509  N   ARG  356    68.463  18.774   3.471  1.00 25.31
ATOM   1510  CA  ARG  356    69.523  19.714   3.130  1.00 25.69
ATOM   1511  CB  ARG  356    69.561  20.820   4.168  1.00 24.06
ATOM   1512  CG  ARG  356    68.337  21.682   4.094  1.00 23.23
ATOM   1513  CD  ARG  356    68.670  22.973   3.424  1.00 25.91
ATOM   1514  NE  ARG  356    69.447  23.814   4.322  1.00 24.87
ATOM   1515  CZ  ARG  356    70.325  24.726   3.928  1.00 25.05
ATOM   1516  NH1 ARG  356    70.546  24.920   2.640  1.00 24.97
ATOM   1517  NH2 ARG  356    70.978  25.453   4.831  1.00 25.62
ATOM   1518  C   ARG  356    70.900  19.109   2.949  1.00 27.73
ATOM   1519  O   ARG  356    71.724  19.645   2.208  1.00 28.38
ATOM   1520  N   LYS  357    71.179  18.048   3.693  1.00 29.45
ATOM   1521  CA  LYS  357    72.457  17.355   3.588  1.00 31.35
ATOM   1522  CB  LYS  357    72.503  16.566   2.270  1.00 32.80
ATOM   1523  CG  LYS  357    71.290  15.650   2.103  1.00 35.78
ATOM   1524  CD  LYS  357    71.264  14.927   0.778  1.00 39.43
ATOM   1525  CE  LYS  357    70.121  13.918   0.739  1.00 42.93
ATOM   1526  NZ  LYS  357    70.162  13.074  -0.498  1.00 45.97
ATOM   1527  C   LYS  357    73.692  18.247   3.743  1.00 31.34
ATOM   1528  O   LYS  357    74.489  18.390   2.818  1.00 32.65
ATOM   1529  N   HIS  358    73.837  18.861   4.913  1.00 30.72
ATOM   1530  CA  HIS  358    74.995  19.706   5.186  1.00 31.49
ATOM   1531  CB  HIS  358    74.895  20.322   6.579  1.00 29.13
ATOM   1532  CG  HIS  358    73.882  21.415   6.688  1.00 25.30
ATOM   1533  CD2 HIS  358    74.026  22.760   6.646  1.00 24.90
ATOM   1534  ND1 HIS  358    72.543  21.175   6.892  1.00 24.54
ATOM   1535  CE1 HIS  358    71.901  22.324   6.975  1.00 23.68
ATOM   1536  NE2 HIS  358    72.777  23.302   6.830  1.00 25.28
ATOM   1537  C   HIS  358    76.235  18.831   5.161  1.00 33.38
ATOM   1538  O   HIS  358    76.166  17.647   5.495  1.00 35.46
ATOM   1539  N   ASN  359    77.366  19.399   4.768  1.00 35.34
ATOM   1540  CA  ASN  359    78.606  18.636   4.746  1.00 38.17
ATOM   1541  CB  ASN  359    79.544  19.150   3.646  1.00 37.84
ATOM   1542  C   ASN  359    79.236  18.825   6.120  1.00 39.85
ATOM   1543  O   ASN  359    80.317  19.406   6.240  1.00 42.72
ATOM   1544  N   ILE  360    78.510  18.411   7.159  1.00 39.01
ATOM   1545  CA  ILE  360    78.968  18.526   8.549  1.00 36.72
ATOM   1546  CB  ILE  360    78.351  19.752   9.264  1.00 37.69
ATOM   1547  CG2 ILE  360    78.802  19.793  10.722  1.00 37.56
ATOM   1548  CG1 ILE  360    78.735  21.049   8.549  1.00 37.68
ATOM   1549  CD1 ILE  360    77.970  22.253   9.041  1.00 38.40
ATOM   1550  C   ILE  360    78.524  17.278   9.303  1.00 35.15
ATOM   1551  O   ILE  360    77.343  16.931   9.314  1.00 33.75
ATOM   1552  N   PRO  361    79.475  16.564   9.912  1.00 34.64
ATOM   1553  CD  PRO  361    80.930  16.785   9.873  1.00 35.59
ATOM   1554  CA  PRO  361    79.138  15.349  10.660  1.00 33.92
ATOM   1555  CB  PRO  361    80.513  14.768  11.014  1.00 35.27
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ATOM  1556  CG  PRO  361      81.412  15.972  11.048  1.00 35.97
ATOM  1557  C   PRO  361      78.292  15.618  11.909  1.00 30.95
ATOM  1558  O   PRO  361      78.555  16.554  12.653  1.00 31.50
ATOM  1559  N   HIS  362      77.269  14.793  12.112  1.00 28.75
ATOM  1560  CA  HIS  362      76.378  14.900  13.263  1.00 30.25
ATOM  1561  CB  HIS  362      77.152  14.612  14.548  1.00 31.20
ATOM  1562  CG  HIS  362      78.075  13.441  14.440  1.00 33.72
ATOM  1563  CD2 HIS  362      77.826  12.122  14.275  1.00 34.55
ATOM  1564  ND1 HIS  362      79.449  13.569  14.469  1.00 35.55
ATOM  1565  CE1 HIS  362      80.006  12.377  14.322  1.00 35.28
ATOM  1566  NE2 HIS  362      79.040  11.484  14.204  1.00 37.61
ATOM  1567  C   HIS  362      75.742  16.275  13.368  1.00 29.44
ATOM  1568  O   HIS  362      75.521  16.769  14.472  1.00 29.93
ATOM  1569  N   PHE  363      75.397  16.856  12.222  1.00 29.22
ATOM  1570  CA  PHE  363      74.803  18.188  12.160  1.00 27.72
ATOM  1571  CB  PHE  363      74.446  18.538  10.709  1.00 26.85
ATOM  1572  CG  PHE  363      73.901  19.931  10.532  1.00 27.48
ATOM  1573  CD1 PHE  363      74.758  21.017  10.391  1.00 27.76
ATOM  1574  CD2 PHE  363      72.523  20.157  10.513  1.00 27.45
ATOM  1575  CE1 PHE  363      74.244  22.313  10.234  1.00 28.56
ATOM  1576  CE2 PHE  363      72.001  21.446  10.357  1.00 25.15
ATOM  1577  CZ  PHE  363      72.860  22.521  10.219  1.00 24.41
ATOM  1578  C   PHE  363      73.597  18.385  13.075  1.00 27.45
ATOM  1579  O   PHE  363      73.577  19.324  13.880  1.00 27.73
ATOM  1580  N   TRP  364      72.616  17.489  12.983  1.00 25.89
ATOM  1581  CA  TRP  364      71.401  17.592  13.800  1.00 25.85
ATOM  1582  CB  TRP  364      70.444  16.426  13.506  1.00 24.27
ATOM  1583  CG  TRP  364      69.168  16.391  14.328  1.00 23.75
ATOM  1584  CD2 TRP  364      68.152  17.407  14.397  1.00 24.87
ATOM  1585  CE2 TRP  364      67.140  16.922  15.261  1.00 24.81
ATOM  1586  CE3 TRP  364      67.989  18.674  13.820  1.00 25.47
ATOM  1587  CD1 TRP  364      68.745  15.370  15.122  1.00 22.98
ATOM  1588  NE1 TRP  364      67.530  15.679  15.684  1.00 25.99
ATOM  1589  CZ2 TRP  364      65.987  17.661  15.560  1.00 25.14
ATOM  1590  CZ3 TRP  364      66.844  19.405  14.116  1.00 25.29
ATOM  1591  CH2 TRP  364      65.857  18.894  14.982  1.00 24.53
ATOM  1592  C   TRP  364      71.659  17.747  15.308  1.00 26.94
ATOM  1593  O   TRP  364      71.202  18.721  15.904  1.00 27.16
ATOM  1594  N   PRO  365      72.382  16.796  15.944  1.00 27.60
ATOM  1595  CD  PRO  365      72.912  15.522  15.411  1.00 27.55
ATOM  1596  CA  PRO  365      72.655  16.915  17.387  1.00 25.90
ATOM  1597  CB  PRO  365      73.565  15.717  17.668  1.00 26.00
ATOM  1598  CG  PRO  365      73.136  14.705  16.658  1.00 28.32
ATOM  1599  C   PRO  365      73.374  18.225  17.714  1.00 23.89
ATOM  1600  O   PRO  365      73.088  18.861  18.725  1.00 23.81
ATOM  1601  N   LYS  366      74.297  18.626  16.845  1.00 24.24
ATOM  1602  CA  LYS  366      75.058  19.862  17.027  1.00 26.24
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ATOM   1603  CB  LYS   366    76.144  19.982  15.963  1.00 27.44
ATOM   1604  CG  LYS   366    77.310  19.022  16.138  1.00 28.76
ATOM   1605  CD  LYS   366    78.254  19.171  14.975  1.00 30.53
ATOM   1606  CE  LYS   366    79.527  18.387  15.167  1.00 34.25
ATOM   1607  NZ  LYS   366    80.388  18.463  13.947  1.00 37.89
ATOM   1608  C   LYS   366    74.181  21.107  16.993  1.00 26.73
ATOM   1609  O   LYS   366    74.385  22.042  17.762  1.00 27.36
ATOM   1610  N   LEU   367    73.216  21.124  16.086  1.00 27.98
ATOM   1611  CA  LEU   367    72.308  22.256  15.967  1.00 27.87
ATOM   1612  CB  LEU   367    71.559  22.192  14.632  1.00 27.29
ATOM   1613  CG  LEU   367    70.613  23.356  14.318  1.00 27.25
ATOM   1614  CD1 LEU   367    71.334  24.707  14.510  1.00 22.90
ATOM   1615  CD2 LEU   367    70.081  23.189  12.896  1.00 24.54
ATOM   1616  C   LEU   367    71.327  22.223  17.134  1.00 29.38
ATOM   1617  O   LEU   367    70.993  23.249  17.716  1.00 31.09
ATOM   1618  N   LEU   368    70.889  21.026  17.491  1.00 30.38
ATOM   1619  CA  LEU   368    69.962  20.843  18.594  1.00 31.14
ATOM   1620  CB  LEU   368    69.659  19.353  18.731  1.00 32.20
ATOM   1621  CG  LEU   368    68.247  18.852  19.014  1.00 33.52
ATOM   1622  CD1 LEU   368    67.184  19.651  18.267  1.00 31.14
ATOM   1623  CD2 LEU   368    68.210  17.379  18.632  1.00 33.99
ATOM   1624  C   LEU   368    70.601  21.395  19.876  1.00 32.36
ATOM   1625  O   LEU   368    69.917  21.963  20.730  1.00 32.58
ATOM   1626  N   MET   369    71.922  21.272  19.985  1.00 33.30
ATOM   1627  CA  MET   369    72.641  21.771  21.149  1.00 34.04
ATOM   1628  CB  MET   369    74.051  21.190  21.209  1.00 35.31
ATOM   1629  CG  MET   369    74.108  19.858  21.935  1.00 36.83
ATOM   1630  SD  MET   369    75.312  18.728  21.235  1.00 43.07
ATOM   1631  CE  MET   369    76.862  19.636  21.472  1.00 41.31
ATOM   1632  C   MET   369    72.675  23.297  21.212  1.00 34.30
ATOM   1633  O   MET   369    72.961  23.876  22.269  1.00 35.82
ATOM   1634  N   LYS   370    72.368  23.949  20.091  1.00 32.14
ATOM   1635  CA  LYS   370    72.325  25.405  20.044  1.00 29.17
ATOM   1636  CB  LYS   370    72.394  25.904  18.608  1.00 28.18
ATOM   1637  CG  LYS   370    73.662  25.518  17.900  1.00 27.72
ATOM   1638  CD  LYS   370    74.866  25.969  18.679  1.00 28.10
ATOM   1639  CE  LYS   370    76.127  25.650  17.930  1.00 27.79
ATOM   1640  NZ  LYS   370    77.298  25.941  18.777  1.00 30.78
ATOM   1641  C   LYS   370    71.033  25.875  20.705  1.00 29.27
ATOM   1642  O   LYS   370    70.950  26.999  21.200  1.00 29.43
ATOM   1643  N   VAL   371    70.018  25.014  20.714  1.00 29.40
ATOM   1644  CA  VAL   371    68.756  25.358  21.358  1.00 29.90
ATOM   1645  CB  VAL   371    67.687  24.237  21.218  1.00 28.75
ATOM   1646  CG1 VAL   371    66.463  24.561  22.064  1.00 27.12
ATOM   1647  CG2 VAL   371    67.275  24.080  19.762  1.00 29.23
ATOM   1648  C   VAL   371    69.075  25.573  22.832  1.00 31.39
ATOM   1649  O   VAL   371    68.543  26.481  23.462  1.00 31.20
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ATOM   1650  N   THR  372      69.971  24.743  23.366  1.00 31.39
ATOM   1651  CA  THR  372      70.371  24.847  24.762  1.00 31.10
ATOM   1652  CB  THR  372      71.282  23.664  25.170  1.00 31.59
ATOM   1653  OG1 THR  372      70.554  22.441  25.008  1.00 30.60
ATOM   1654  CG2 THR  372      71.720  23.795  26.625  1.00 30.14
ATOM   1655  C   THR  372      71.071  26.186  24.994  1.00 30.76
ATOM   1656  O   THR  372      70.711  26.935  25.910  1.00 31.45
ATOM   1657  N   ASP  373      72.038  26.507  24.138  1.00 29.31
ATOM   1658  CA  ASP  373      72.744  27.772  24.252  1.00 27.32
ATOM   1659  CB  ASP  373      73.745  27.934  23.115  1.00 27.98
ATOM   1660  CG  ASP  373      74.886  26.933  23.190  1.00 28.94
ATOM   1661  OD1 ASP  373      75.043  26.259  24.225  1.00 31.01
ATOM   1662  OD2 ASP  373      75.639  26.825  22.205  1.00 31.38
ATOM   1663  C   ASP  373      71.742  28.926  24.247  1.00 26.50
ATOM   1664  O   ASP  373      71.872  29.861  25.040  1.00 27.35
ATOM   1665  N   LEU  374      70.711  28.826  23.412  1.00 24.17
ATOM   1666  CA  LEU  374      69.688  29.864  23.331  1.00 23.38
ATOM   1667  CB  LEU  374      68.795  29.660  22.107  1.00 22.98
ATOM   1668  CG  LEU  374      69.361  30.183  20.786  1.00 24.45
ATOM   1669  CD1 LEU  374      68.668  29.520  19.589  1.00 24.72
ATOM   1670  CD2 LEU  374      69.223  31.704  20.735  1.00 22.40
ATOM   1671  C   LEU  374      68.839  29.964  24.589  1.00 24.31
ATOM   1672  O   LEU  374      68.442  31.065  24.986  1.00 23.31
ATOM   1673  N   ARG  375      68.543  28.826  25.211  1.00 25.32
ATOM   1674  CA  ARG  375      67.748  28.821  26.438  1.00 27.76
ATOM   1675  CB  ARG  375      67.455  27.392  26.908  1.00 30.82
ATOM   1676  CG  ARG  375      66.901  26.439  25.854  1.00 38.79
ATOM   1677  CD  ARG  375      65.424  26.630  25.582  1.00 45.40
ATOM   1678  NE  ARG  375      64.709  25.360  25.620  1.00 52.61
ATOM   1679  CZ  ARG  375      63.800  24.967  24.726  1.00 56.89
ATOM   1680  NH1 ARG  375      63.473  25.732  23.694  1.00 58.27
ATOM   1681  NH2 ARG  375      63.201  23.793  24.855  1.00 58.46
ATOM   1682  C   ARG  375      68.563  29.542  27.512  1.00 26.98
ATOM   1683  O   ARG  375      68.025  30.336  28.282  1.00 26.18
ATOM   1684  N   MET  376      69.862  29.255  27.551  1.00 26.80
ATOM   1685  CA  MET  376      70.767  29.867  28.511  1.00 29.22
ATOM   1686  CB  MET  376      72.172  29.270  28.379  1.00 33.70
ATOM   1687  CG  MET  376      72.595  28.371  29.562  1.00 43.20
ATOM   1688  SD  MET  376      73.320  29.260  31.011  1.00 52.38
ATOM   1689  CE  MET  376      71.843  29.854  31.913  1.00 48.11
ATOM   1690  C   MET  376      70.804  31.384  28.339  1.00 27.54
ATOM   1691  O   MET  376      70.792  32.126  29.323  1.00 26.96
ATOM   1692  N   ILE  377      70.841  31.835  27.087  1.00 25.39
ATOM   1693  CA  ILE  377      70.847  33.264  26.767  1.00 23.26
ATOM   1694  CB  ILE  377      70.992  33.488  25.222  1.00 22.73
ATOM   1695  CG2 ILE  377      70.560  34.909  24.819  1.00 21.81
ATOM   1696  CG1 ILE  377      72.431  33.205  24.789  1.00 20.39
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ATOM  1697 CD1 ILE  377   72.644 33.148 23.300 1.00 18.85
ATOM  1698 C   ILE  377   69.558 33.900 27.309 1.00 22.91
ATOM  1699 O   ILE  377   69.597 34.925 27.989 1.00 22.02
ATOM  1700 N   GLY  378   68.427 33.244 27.069 1.00 22.29
ATOM  1701 CA  GLY  378   67.161 33.757 27.547 1.00 22.83
ATOM  1702 C   GLY  378   67.111 33.815 29.063 1.00 25.60
ATOM  1703 O   GLY  378   66.546 34.752 29.630 1.00 26.25
ATOM  1704 N   ALA  379   67.691 32.804 29.713 1.00 26.88
ATOM  1705 CA  ALA  379   67.744 32.707 31.175 1.00 27.19
ATOM  1706 CB  ALA  379   68.322 31.358 31.590 1.00 26.97
ATOM  1707 C   ALA  379   68.606 33.827 31.738 1.00 26.13
ATOM  1708 O   ALA  379   68.174 34.580 32.601 1.00 26.46
ATOM  1709 N   CYA  380   69.826 33.935 31.230 1.00 27.61
ATOM  1710 CA  CYA  380   70.742 34.973 31.667 1.00 29.74
ATOM  1711 CB  CYA  380   72.070 34.865 30.923 1.00 35.44
ATOM  1712 SG  CYA  380   73.081 33.458 31.417 1.00 42.61
ATOM  1713 AS  CYA  380   74.829 33.691 29.945 1.00 55.91
ATOM  1714 C   CYA  380   70.142 36.349 31.446 1.00 29.07
ATOM  1715 O   CYA  380   70.243 37.225 32.303 1.00 29.46
ATOM  1716 N   HIS  381   69.494 36.538 30.304 1.00 28.29
ATOM  1717 CA  HIS  381   68.885 37.824 30.002 1.00 26.84
ATOM  1718 CB  HIS  381   68.384 37.880 28.557 1.00 23.13
ATOM  1719 CG  HIS  381   67.597 39.113 28.259 1.00 19.84
ATOM  1720 CD2 HIS  381   67.993 40.365 27.931 1.00 18.68
ATOM  1721 ND1 HIS  381   66.229 39.169 28.403 1.00 19.47
ATOM  1722 CE1 HIS  381   65.817 40.407 28.190 1.00 18.64
ATOM  1723 NE2 HIS  381   66.868 41.149 27.900 1.00 18.29
ATOM  1724 C   HIS  381   67.747 38.157 30.967 1.00 26.78
ATOM  1725 O   HIS  381   67.560 39.314 31.337 1.00 26.39
ATOM  1726 N   ALA  382   66.964 37.158 31.347 1.00 27.78
ATOM  1727 CA  ALA  382   65.867 37.395 32.269 1.00 29.45
ATOM  1728 CB  ALA  382   65.077 36.125 32.471 1.00 29.51
ATOM  1729 C   ALA  382   66.425 37.904 33.604 1.00 31.74
ATOM  1730 O   ALA  382   65.932 38.882 34.159 1.00 32.60
ATOM  1731 N   SER  383   67.483 37.262 34.093 1.00 33.02
ATOM  1732 CA  SER  383   68.109 37.662 35.350 1.00 34.69
ATOM  1733 CB  SER  383   69.212 36.677 35.733 1.00 36.18
ATOM  1734 OG  SER  383   68.663 35.386 35.933 1.00 40.61
ATOM  1735 C   SER  383   68.689 39.064 35.242 1.00 33.49
ATOM  1736 O   SER  383   68.526 39.889 36.146 1.00 34.28
ATOM  1737 N   ARG  384   69.377 39.332 34.141 1.00 32.60
ATOM  1738 CA  ARG  384   69.955 40.642 33.938 1.00 32.60
ATOM  1739 CB  ARG  384   70.926 40.638 32.762 1.00 33.60
ATOM  1740 CG  ARG  384   71.429 42.013 32.409 1.00 36.33
ATOM  1741 CD  ARG  384   72.875 41.975 31.993 1.00 39.62
ATOM  1742 NE  ARG  384   73.760 42.260 33.114 1.00 41.76
ATOM  1743 CZ  ARG  384   74.587 43.301 33.179 1.00 41.92
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ATOM   1744  NH1 ARG   384      74.670  44.182  32.191  1.00 40.66
ATOM   1745  NH2 ARG   384      75.319  43.471  34.260  1.00 44.88
ATOM   1746  C   ARG   384      68.862  41.694  33.758  1.00 32.28
ATOM   1747  O   ARG   384      69.014  42.831  34.213  1.00 33.27
ATOM   1748  N   PHE   385      67.739  41.311  33.159  1.00 29.13
ATOM   1749  CA  PHE   385      66.663  42.259  32.977  1.00 27.55
ATOM   1750  CB  PHE   385      65.552  41.687  32.105  1.00 26.89
ATOM   1751  CG  PHE   385      64.415  42.641  31.888  1.00 25.11
ATOM   1752  CD1 PHE   385      64.495  43.630  30.918  1.00 24.94
ATOM   1753  CD2 PHE   385      63.281  42.580  32.689  1.00 25.01
ATOM   1754  CE1 PHE   385      63.466  44.547  30.753  1.00 25.50
ATOM   1755  CE2 PHE   385      62.244  43.495  32.531  1.00 24.06
ATOM   1756  CZ  PHE   385      62.338  44.482  31.563  1.00 25.44
ATOM   1757  C   PHE   385      66.125  42.641  34.348  1.00 29.08
ATOM   1758  O   PHE   385      65.887  43.816  34.613  1.00 27.90
ATOM   1759  N   LEU   386      65.972  41.658  35.231  1.00 31.19
ATOM   1760  CA  LEU   386      65.465  41.929  36.577  1.00 33.22
ATOM   1761  CB  LEU   386      65.355  40.640  37.397  1.00 34.35
ATOM   1762  C   LEU   386      66.362  42.940  37.279  1.00 33.52
ATOM   1763  O   LEU   386      65.874  43.907  37.855  1.00 32.93
ATOM   1764  N   HIS   387      67.673  42.760  37.158  1.00 34.80
ATOM   1765  CA  HIS   387      68.628  43.674  37.775  1.00 37.88
ATOM   1766  CB  HIS   387      70.042  43.112  37.705  1.00 36.66
ATOM   1767  CG  HIS   387      70.206  41.832  38.456  1.00 39.14
ATOM   1768  CD2 HIS   387      69.307  41.080  39.144  1.00 39.28
ATOM   1769  ND1 HIS   387      71.408  41.161  38.543  1.00 40.97
ATOM   1770  CE1 HIS   387      71.241  40.055  39.245  1.00 41.57
ATOM   1771  NE2 HIS   387      69.980  39.984  39.618  1.00 41.45
ATOM   1772  C   HIS   387      68.589  45.071  37.164  1.00 40.38
ATOM   1773  O   HIS   387      68.673  46.054  37.888  1.00 40.87
ATOM   1774  N   MET   388      68.466  45.161  35.842  1.00 43.32
ATOM   1775  CA  MET   388      68.398  46.455  35.168  1.00 46.28
ATOM   1776  CB  MET   388      68.170  46.286  33.665  1.00 43.30
ATOM   1777  CG  MET   388      69.342  45.738  32.875  1.00 43.55
ATOM   1778  SD  MET   388      69.034  45.896  31.098  1.00 46.27
ATOM   1779  CE  MET   388      68.208  44.370  30.709  1.00 42.36
ATOM   1780  C   MET   388      67.256  47.289  35.737  1.00 50.25
ATOM   1781  O   MET   388      67.363  48.506  35.886  1.00 49.79
ATOM   1782  N   LYS   389      66.163  46.610  36.075  1.00 52.74   ALTA
ATOM   1783  CA  LYS   389      64.983  47.274  36.633  1.00 56.15   ALTA
ATOM   1784  CB  LYS   389      63.770  46.334  36.565  1.00 56.87   ALTA
ATOM   1785  CG  LYS   389      63.227  46.087  35.161  1.00 57.76   ALTA
ATOM   1786  CD  LYS   389      62.029  45.156  35.212  1.00 55.98   ALTA
ATOM   1787  CE  LYS   389      62.426  43.796  35.778  1.00 55.48   ALTA
ATOM   1788  NZ  LYS   389      61.267  43.040  36.311  1.00 55.55   ALTA
ATOM   1789  C   LYS   389      65.177  47.767  38.064  1.00 56.69   ALTA
ATOM   1790  O   LYS   389      64.623  48.814  38.453  1.00 58.54   ALTA
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ATOM   1791  N   VAL   390     65.955  47.038  38.839  1.00 55.21
ATOM   1792  CA  VAL   390     66.225  47.386  40.236  1.00 51.78
ATOM   1793  CB  VAL   390     66.999  46.231  40.985  1.00 50.07
ATOM   1794  CG1 VAL   390     67.648  46.726  42.263  1.00 49.74
ATOM   1795  CG2 VAL   390     66.037  45.093  41.317  1.00 49.06
ATOM   1796  C·  VAL   390     67.053  48.681  40.227  1.00 49.38
ATOM   1797  O   VAL   390     66.785  49.605  40.992  1.00 48.71
ATOM   1798  N   GLU   391     67.974  48.778  39.272  1.00 46.71
ATOM   1799  CA  GLU   391     68.866  49.919  39.142  1.00 44.88
ATOM   1800  CB  GLU   391     70.156  49.488  38.438  1.00 45.24
ATOM   1801  CG  GLU   391     70.793  48.207  38.997  1.00 47.65
ATOM   1802  CD  GLU   391     71.461  48.388  40.358  1.00 50.29
ATOM   1803  OE1 GLU   391     71.141  49.373  41.063  1.00 50.68
ATOM   1804  OE2 GLU   391     72.310  47.535  40.718  1.00 50.85
ATOM   1805  C   GLU   391     68.324  51.174  38.458  1.00 45.28
ATOM   1806  O   GLU   391     68.568  52.286  38.940  1.00 46.46
ATOM   1807  N   CYA   392     67.568  51.024  37.372  1.00 43.33
ATOM   1808  CA  CYA   392     67.071  52.192  36.643  1.00 42.28
ATOM   1809  CB  CYA   392     67.519  52.096  35.197  1.00 42.45
ATOM   1810  SG  CYA   392     69.280  52.182  35.127  1.00 43.69
ATOM   1811  AS  CYA   392     69.908  51.044  33.336  1.00 48.17
ATOM   1812  C   CYA   392     65.589  52.493  36.709  1.00 42.51
ATOM   1813  O   CYA   392     64.792  51.634  37.070  1.00 43.30
ATOM   1814  N   PRO   393     65.205  53.752  36.418  1.00 42.13
ATOM   1815  CD  PRO   393     66.109  54.899  36.199  1.00 40.54
ATOM   1816  CA  PRO   393     63.794  54.182  36.441  1.00 42.26
ATOM   1817  CB  PRO   393     63.896  55.710  36.365  1.00 41.47
ATOM   1818  CG  PRO   393     65.189  55.938  35.614  1.00 41.10
ATOM   1819  C   PRO   393     62.954  53.606  35.281  1.00 43.20
ATOM   1820  O   PRO   393     63.463  53.452  34.163  1.00 42.61
ATOM   1821  N   THR   394     61.686  53.305  35.559  1.00 43.70
ATOM   1822  CA  THR   394     60.764  52.755  34.564  1.00 45.50
ATOM   1823  CB  THR   394     59.340  52.609  35.129  1.00 47.20
ATOM   1824  OG1 THR   394     59.304  53.139  36.464  1.00 50.57
ATOM   1825  CG2 THR   394     58.878  51.150  35.137  1.00 47.99
ATOM   1826  C   THR   394     60.682  53.583  33.283  1.00 44.58
ATOM   1827  O   THR   394     60.409  53.054  32.215  1.00 46.36
ATOM   1828  N   GLU   395     60.899  54.888  33.396  1.00 42.88
ATOM   1829  CA  GLU   395     60.842  55.790  32.246  1.00 40.54
ATOM   1830  CB  GLU   395     61.096  57.234  32.699  1.00 40.69
ATOM   1831  C   GLU   395     61.799  55.421  31.098  1.00 38.51
ATOM   1832  O   GLU   395     61.628  55.877  29.968  1.00 39.41
ATOM   1833  N   LEU   396     62.828  54.640  31.402  1.00 35.60
ATOM   1834  CA  LEU   396     63.795  54.220  30.386  1.00 33.11
ATOM   1835  CB  LEU   396     65.169  54.003  31.027  1.00 33.60
ATOM   1836  CG  LEU   396     65.831  55.230  31.660  1.00 34.54
ATOM   1837  CD1 LEU   396     67.160  54.835  32.282  1.00 32.83
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ATOM  1838  CD2 LEU  396    66.026  56.308  30.599  1.00 35.71
ATOM  1839  C   LEU  396    63.388  52.940  29.660  1.00 30.95
ATOM  1840  O   LEU  396    63.950  52.605  28.624  1.00 30.90
ATOM  1841  N   PHE  397    62.422  52.227  30.223  1.00 30.18
ATOM  1842  CA  PHE  397    61.961  50.970  29.654  1.00 28.80
ATOM  1843  CB  PHE  397    61.712  49.946  30.777  1.00 28.10
ATOM  1844  CG  PHE  397    62.938  49.604  31.592  1.00 28.96
ATOM  1845  CD1 PHE  397    63.403  50.472  32.591  1.00 28.39
ATOM  1846  CD2 PHE  397    63.636  48.422  31.359  1.00 26.28
ATOM  1847  CE1 PHE  397    64.546  50.166  33.337  1.00 28.44
ATOM  1848  CE2 PHE  397    64.784  48.107  32.103  1.00 29.21
ATOM  1849  CZ  PHE  397    65.240  48.984  33.096  1.00 27.37
ATOM  1850  C   PHE  397    60.683  51.093  28.836  1.00 27.54
ATOM  1851  O   PHE  397    59.630  51.431  29.370  1.00 26.96
ATOM  1852  N   PRO  398    60.753  50.836  27.501  1.00 27.41
ATOM  1853  CD  PRO  398    61.968  50.600  26.686  1.00 25.42
ATOM  1854  CA  PRO  398    59.560  50.920  26.654  1.00 25.90
ATOM  1855  CB  PRO  398    60.068  50.383  25.320  1.00 25.26
ATOM  1856  CG  PRO  398    61.490  50.893  25.290  1.00 23.99
ATOM  1857  C   PRO  398    58.494  49.995  27.272  1.00 25.86
ATOM  1858  O   PRO  398    58.839  48.962  27.843  1.00 25.82
ATOM  1859  N   PRO  399    57.197  50.355  27.175  1.00 25.52
ATOM  1860  CD  PRO  399    56.627  51.576  26.578  1.00 25.49
ATOM  1861  CA  PRO  399    56.145  49.510  27.754  1.00 25.42
ATOM  1862  CB  PRO  399    54.861  50.181  27.273  1.00 26.23
ATOM  1863  CG  PRO  399    55.237  51.609  27.156  1.00 25.25
ATOM  1864  C   PRO  399    56.198  48.043  27.317  1.00 26.08
ATOM  1865  O   PRO  399    56.132  47.131  28.159  1.00 25.45
ATOM  1866  N   LEU  400    56.350  47.810  26.019  1.00 25.57
ATOM  1867  CA  LEU  400    56.406  46.440  25.509  1.00 26.27
ATOM  1868  CB  LEU  400    56.404  46.418  23.980  1.00 25.03
ATOM  1869  CG  LEU  400    56.117  45.042  23.363  1.00 24.51
ATOM  1870  CD1 LEU  400    54.757  44.530  23.806  1.00 23.22
ATOM  1871  CD2 LEU  400    56.173  45.149  21.862  1.00 23.70
ATOM  1872  C   LEU  400    57.602  45.657  26.067  1.00 27.06
ATOM  1873  O   LEU  400    57.484  44.465  26.363  1.00 27.41
ATOM  1874  N   PHE  401    58.736  46.339  26.231  1.00 27.16
ATOM  1875  CA  PHE  401    59.966  45.754  26.779  1.00 27.06
ATOM  1876  CB  PHE  401    61.047  46.833  26.802  1.00 26.60
ATOM  1877  CG  PHE  401    62.408  46.351  27.217  1.00 28.08
ATOM  1878  CD1 PHE  401    62.918  45.138  26.747  1.00 27.45
ATOM  1879  CD2 PHE  401    63.223  47.165  28.013  1.00 27.48
ATOM  1880  CE1 PHE  401    64.220  44.746  27.055  1.00 26.95
ATOM  1881  CE2 PHE  401    64.523  46.786  28.327  1.00 27.97
ATOM  1882  CZ  PHE  401    65.028  45.575  27.846  1.00 28.46
ATOM  1883  C   PHE  401    59.690  45.247  28.205  1.00 27.62
ATOM  1884  O   PHE  401    60.046  44.125  28.570  1.00 26.24
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ATOM	1885	N	LEU	402	59.036	46.082	29.002	1.00	28.75	
ATOM	1886	CA	LEU	402	58.692	45.719	30.366	1.00	29.58	
ATOM	1887	CB	LEU	402	58.064	46.910	31.088	1.00	30.04	
ATOM	1888	CG	LEU	402	59.025	47.974	31.594	1.00	30.14	
ATOM	1889	CD1	LEU	402	58.270	49.263	31.880	1.00	29.61	
ATOM	1890	CD2	LEU	402	59.734	47.438	32.827	1.00	27.99	
ATOM	1891	C	LEU	402	57.693	44.583	30.368	1.00	30.10	
ATOM	1892	O	LEU	402	57.836	43.631	31.121	1.00	29.78	
ATOM	1893	N	GLU	403	56.688	44.683	29.510	1.00	30.49	
ATOM	1894	CA	GLU	403	55.646	43.671	29.453	1.00	32.60	
ATOM	1895	CB	GLU	403	54.562	44.094	28.469	1.00	37.01	
ATOM	1896	CG	GLU	403	53.329	43.218	28.520	1.00	44.01	
ATOM	1897	CD	GLU	403	52.263	43.632	27.523	1.00	48.50	
ATOM	1898	OE1	GLU	403	52.516	44.525	26.677	1.00	49.66	
ATOM	1899	OE2	GLU	403	51.157	43.050	27.594	1.00	53.06	
ATOM	1900	C	GLU	403	56.083	42.237	29.151	1.00	32.03	
ATOM	1901	O	GLU	403	55.627	41.304	29.816	1.00	32.58	
ATOM	1902	N	VAL	404	56.955	42.078	28.159	0.50	31.51	ALTA
ATOM	1903	CA	VAL	404	57.450	40.765	27.739	0.50	30.96	ALTA
ATOM	1904	CB	VAL	404	58.108	40.849	26.333	0.50	30.32	ALTA
ATOM	1905	CG1	VAL	404	58.616	39.489	25.889	0.50	28.72	ALTA
ATOM	1906	CG2	VAL	404	57.115	41.388	25.328	0.50	31.67	ALTA
ATOM	1907	C	VAL	404	58.465	40.149	28.696	0.50	30.45	ALTA
ATOM	1908	O	VAL	404	58.549	38.926	28.822	0.50	30.10	ALTA
ATOM	1909	N	PHE	405	59.224	41.002	29.369	1.00	30.16	
ATOM	1910	CA	PHE	405	60.266	40.549	30.263	1.00	30.65	
ATOM	1911	CB	PHE	405	61.577	41.221	29.863	1.00	28.92	
ATOM	1912	CG	PHE	405	62.062	40.834	28.493	1.00	26.31	
ATOM	1913	CD1	PHE	405	62.342	41.804	27.543	1.00	25.72	
ATOM	1914	CD2	PHE	405	62.269	39.500	28.166	1.00	25.92	
ATOM	1915	CE1	PHE	405	62.827	41.456	26.278	1.00	26.78	
ATOM	1916	CE2	PHE	405	62.752	39.139	26.910	1.00	25.39	
ATOM	1917	CZ	PHE	405	63.034	40.122	25.962	1.00	24.39	
ATOM	1918	C	PHE	405	60.011	40.674	31.771	1.00	32.10	
ATOM	1919	O	PHE	405	60.903	40.237	32.533	1.00	33.88	
ATOM	1920	OXT	PHE	405	58.936	41.169	32.188	1.00	34.95	
ATOM	1	O1	HOH	501	67.542	37.066	11.311	1.00	26.83	
ATOM	3	O1	HOH	502	68.713	41.227	12.821	1.00	23.42	
ATOM	2	O1	HOH	503	64.446	40.325	12.123	1.00	22.84	
ATOM	4	O1	HOH	504	62.236	39.752	15.941	1.00	17.97	
ATOM	5	O1	HOH	505	48.732	20.137	5.515	1.00	50.48	
ATOM	6	O1	HOH	506	47.365	21.522	3.716	1.00	53.40	
ATOM	7	O1	HOH	507	50.211	23.203	7.900	1.00	32.66	
ATOM	8	O1	HOH	508	51.043	20.258	8.253	1.00	21.81	
ATOM	9	O1	HOH	509	48.225	18.176	7.905	1.00	38.96	
ATOM	10	O1	HOH	510	49.569	20.871	11.586	1.00	32.97	
ATOM	11	O1	HOH	511	53.732	17.159	10.856	1.00	47.20	

ATOM	12	O1	HOH	512	56.201	16.223	12.164	1.00 18.50
ATOM	13	O1	HOH	513	56.653	12.298	10.528	1.00 27.71
ATOM	14	O1	HOH	514	58.661	10.694	9.014	1.00 46.73
ATOM	15	O1	HOH	515	62.950	10.692	11.952	1.00 43.05
ATOM	16	O1	HOH	516	66.411	11.552	10.897	1.00 37.36
ATOM	17	O1	HOH	517	68.949	13.188	12.029	1.00 39.28
ATOM	18	O1	HOH	518	71.997	15.171	8.362	1.00 49.69
ATOM	19	O1	HOH	519	71.946	17.928	6.743	1.00 24.50
ATOM	20	O1	HOH	520	75.117	15.684	9.377	1.00 35.98
ATOM	21	O1	HOH	521	76.677	12.815	10.294	1.00 49.33
ATOM	22	O1	HOH	522	81.421	15.415	15.139	1.00 46.74
ATOM	23	O1	HOH	523	78.784	21.696	17.564	1.00 49.01
ATOM	24	O1	HOH	524	79.954	24.822	17.152	1.00 42.91
ATOM	25	O1	HOH	525	82.199	30.253	18.821	1.00 40.27
ATOM	26	O1	HOH	526	82.862	33.444	21.988	1.00 46.81
ATOM	27	O1	HOH	527	76.608	30.793	23.452	1.00 46.22
ATOM	28	O1	HOH	528	74.726	30.483	25.469	1.00 43.76
ATOM	29	O1	HOH	529	77.059	28.762	20.900	1.00 33.67
ATOM	30	O1	HOH	530	75.935	33.279	12.269	1.00 25.26
ATOM	31	O1	HOH	531	77.402	34.447	10.087	1.00 37.04
ATOM	32	O1	HOH	532	74.054	29.941	9.998	1.00 26.86
ATOM	33	O1	HOH	533	69.544	32.658	7.572	1.00 40.34
ATOM	34	O1	HOH	534	66.709	33.618	8.477	1.00 20.63
ATOM	35	O1	HOH	535	68.073	35.828	8.931	1.00 23.99
ATOM	36	O1	HOH	536	61.865	45.643	14.011	1.00 40.43
ATOM	37	O1	HOH	537	63.662	46.881	15.670	1.00 28.04
ATOM	38	O1	HOH	538	63.391	49.310	13.883	1.00 39.59
ATOM	39	O1	HOH	539	63.491	50.570	10.631	1.00 52.34
ATOM	40	O1	HOH	540	64.592	46.849	10.299	1.00 26.63
ATOM	41	O1	HOH	541	55.575	41.632	10.980	1.00 38.06
ATOM	42	O1	HOH	542	51.631	42.062	17.343	1.00 45.99
ATOM	43	O1	HOH	543	52.755	43.156	20.209	1.00 34.17
ATOM	44	O1	HOH	544	57.061	49.627	24.004	1.00 24.09
ATOM	45	O1	HOH	545	61.040	50.561	21.351	1.00 30.91
ATOM	46	O1	HOH	546	68.533	53.616	18.390	1.00 30.91
ATOM	47	O1	HOH	547	63.371	58.813	29.014	1.00 59.25
ATOM	48	O1	HOH	548	57.934	52.905	31.175	1.00 40.12
ATOM	49	O1	HOH	549	62.364	50.496	37.543	1.00 52.28
ATOM	50	O1	HOH	550	62.256	49.704	40.891	1.00 54.18
ATOM	51	O1	HOH	551	61.994	46.430	40.384	1.00 43.84
ATOM	52	O1	HOH	552	63.675	44.459	39.268	1.00 44.73
ATOM	53	O1	HOH	553	58.405	43.920	33.936	1.00 42.88
ATOM	54	O1	HOH	554	62.863	39.071	34.046	1.00 45.07
ATOM	55	O1	HOH	555	64.426	36.925	28.676	1.00 25.36
ATOM	56	O1	HOH	556	62.375	35.807	26.610	1.00 21.14
ATOM	57	O1	HOH	557	63.684	33.760	25.609	1.00 33.03
ATOM	58	O1	HOH	558	61.542	29.906	24.568	1.00 57.37

ATOM	59	O1	HOH	559	62.353	27.540	24.855	1.00	39.63
ATOM	60	O1	HOH	560	62.814	28.785	27.536	1.00	58.40
ATOM	61	O1	HOH	561	65.531	30.642	28.821	1.00	54.44
ATOM	62	O1	HOH	562	63.423	24.645	32.964	1.00	50.75
ATOM	63	O1	HOH	563	64.697	21.149	28.711	1.00	51.41
ATOM	64	O1	HOH	564	67.100	23.370	26.900	1.00	52.36
ATOM	65	O1	HOH	565	65.582	20.422	23.303	1.00	40.32
ATOM	66	O1	HOH	566	61.577	18.167	23.386	1.00	65.08
ATOM	67	O1	HOH	567	61.022	22.649	25.573	1.00	48.85
ATOM	68	O1	HOH	568	57.919	21.446	25.147	1.00	43.39
ATOM	69	O1	HOH	569	59.435	20.179	28.543	1.00	51.41
ATOM	70	O1	HOH	570	53.860	23.216	30.984	1.00	50.28
ATOM	71	O1	HOH	571	52.825	24.880	32.696	1.00	43.96
ATOM	72	O1	HOH	572	48.228	29.683	30.486	1.00	44.51
ATOM	73	O1	HOH	573	48.925	34.467	30.521	1.00	36.28
ATOM	74	O1	HOH	574	50.766	40.547	29.178	1.00	51.45
ATOM	75	O1	HOH	575	57.058	32.490	30.420	1.00	31.03
ATOM	76	O1	HOH	576	58.075	29.544	24.664	1.00	19.54
ATOM	77	O1	HOH	577	47.451	19.292	28.703	1.00	33.04
ATOM	78	O1	HOH	578	53.120	15.471	17.478	1.00	35.68
ATOM	79	O1	HOH	579	55.101	14.146	16.095	1.00	50.46
ATOM	80	O1	HOH	580	53.726	14.016	9.059	1.00	41.44
ATOM	81	O1	HOH	581	57.223	13.820	1.435	1.00	48.31
ATOM	82	O1	HOH	582	61.169	15.688	0.210	1.00	17.60
ATOM	83	O1	HOH	583	67.411	16.019	-0.314	1.00	23.93
ATOM	84	O1	HOH	584	67.033	17.221	-2.796	1.00	26.21
ATOM	85	O1	HOH	585	69.893	19.520	-1.582	1.00	59.67
ATOM	86	O1	HOH	586	68.489	22.464	0.350	1.00	37.85
ATOM	87	O1	HOH	587	65.794	23.354	0.823	1.00	27.38
ATOM	88	O1	HOH	588	67.550	26.810	0.937	1.00	37.18
ATOM	89	O1	HOH	589	64.646	28.208	3.323	1.00	36.74
ATOM	90	O1	HOH	590	67.215	31.103	3.174	1.00	30.29
ATOM	91	O1	HOH	591	64.164	35.667	6.220	1.00	39.72
ATOM	92	O1	HOH	592	62.810	37.518	4.836	1.00	48.48
ATOM	93	O1	HOH	593	68.105	36.898	6.110	1.00	58.00
ATOM	94	O1	HOH	594	57.390	37.485	2.631	1.00	37.29
ATOM	95	O1	HOH	595	53.088	36.068	3.949	1.00	50.10
ATOM	96	O1	HOH	596	52.974	34.676	6.758	1.00	42.52
ATOM	97	O1	HOH	597	58.581	31.465	2.076	1.00	32.18
ATOM	98	O1	HOH	598	52.786	23.277	1.357	1.00	28.98
ATOM	99	O1	HOH	599	47.501	26.551	7.672	1.00	47.83
ATOM	100	O1	HOH	600	46.411	35.754	14.049	1.00	53.46
ATOM	101	O1	HOH	601	63.514	14.944	15.842	1.00	55.02
ATOM	102	O1	HOH	602	67.943	11.792	3.438	1.00	61.21
ATOM	103	O1	HOH	603	62.232	9.378	3.311	1.00	35.65
ATOM	104	O1	HOH	604	76.734	22.468	5.002	1.00	42.56
ATOM	105	O1	HOH	605	83.589	28.967	9.626	1.00	50.64

ATOM	106	O1	HOH	606	82.807	43.437	17.940	1.00	39.28
ATOM	107	O1	HOH	607	83.882	45.673	20.638	1.00	41.64
ATOM	108	O1	HOH	608	80.215	41.021	23.441	1.00	43.16
ATOM	109	O1	HOH	609	79.459	46.296	31.165	1.00	32.40
ATOM	110	O1	HOH	610	81.880	47.681	33.923	1.00	46.96
ATOM	111	O1	HOH	611	75.594	46.142	30.384	1.00	28.64
ATOM	112	O1	HOH	612	77.118	40.568	32.575	1.00	34.21
ATOM	113	O1	HOH	613	73.563	41.750	36.926	1.00	26.07
ATOM	114	O1	HOH	614	75.955	56.565	28.863	1.00	46.31
ATOM	115	O1	HOH	615	79.915	59.136	15.809	1.00	50.81
ATOM	116	O1	HOH	616	77.390	52.542	8.816	1.00	34.34
ATOM	117	O1	HOH	617	72.726	25.005	29.671	1.00	62.84
ATOM	2038	C	ACY	701	52.664	40.106	24.800	1.00	46.39
ATOM	2039	O	ACY	701	53.721	39.649	24.298	1.00	47.12
ATOM	2040	OXT	ACY	701	51.652	40.521	24.172	1.00	46.96
ATOM	2041	CH3	ACY	701	52.600	40.162	26.329	1.00	45.99
ATOM	2050	C1	T3	1	66.961	42.243	18.491	1.00	22.34
ATOM	2051	C2	T3	1	68.748	43.593	23.015	1.00	21.84
ATOM	2052	C3	T3	1	66.873	43.557	18.970	1.00	23.43
ATOM	2053	C4	T3	1	69.252	44.540	23.871	1.00	22.31
ATOM	2054	C5	T3	1	67.638	43.989	20.011	1.00	24.83
ATOM	2055	C6	T3	1	68.851	44.553	25.178	1.00	25.16
ATOM	2056	C7	T3	1	68.541	43.108	20.632	1.00	24.65
ATOM	2057	C8	T3	1	67.895	43.567	25.639	1.00	21.93
ATOM	2058	C9	T3	1	68.665	41.792	20.183	1.00	25.09
ATOM	2059	C10	T3	1	67.427	42.654	24.733	1.00	23.66
ATOM	2060	C11	T3	1	67.878	41.380	19.117	1.00	23.12
ATOM	2061	C12	T3	1	67.829	42.624	23.384	1.00	19.67
ATOM	2062	C13	T3	1	66.055	41.788	17.371	1.00	18.97
ATOM	2063	C15	T3	1	66.721	40.956	16.295	1.00	19.32
ATOM	2064	C17	T3	1	65.901	40.829	15.051	1.00	19.02
ATOM	2065	I1	T3	1	67.393	45.986	20.621	1.00	25.29
ATOM	2066	I2	T3	1	69.483	46.066	26.432	1.00	26.49
ATOM	2067	I3	T3	1	70.019	40.450	20.975	1.00	25.67
ATOM	2068	N1	T3	1	68.131	41.337	16.037	1.00	15.12
ATOM	2069	O1	T3	1	67.542	43.587	26.966	1.00	21.79
ATOM	2070	O2	T3	1	69.259	43.600	21.682	1.00	22.05
ATOM	2071	O3	T3	1	66.504	40.852	13.963	1.00	20.38
ATOM	2072	O4	T3	1	64.675	40.731	15.192	1.00	20.16

END

APPENDIX 7

TRBTRIAC.PDB

REMARK TR-beta Triac Full length numbering
REMARK refinement resolution: 100 - 2.9 A r= 0.273258 free_r= 0.333794
REMARK wa= 5.78307
REMARK target= mlf cycles= 1 steps= 25
REMARK a= 68.72 b= 68.72 c= 130.092 alpha= 90 beta= 90 gamma= 120
REMARK ncs= none
REMARK initial B-factor correction: "none"
REMARK ALA 199 to ALA 201 from His-tag
REMARK
REMARK Four cacodylate-modified cysteines (CYA) ·
REMARK Cys294, Cys298, Cys388, Cys434
REMARK cacodylate modeled as single arsenic atom
REMARK
REMARK side chain of certain residues modeled as ALA due to poor density;
REMARK however, residue name reflects true residue for clarity
REMARK
REMARK amino acid sequence confirmed,
REMARK differing from that reported by Weinberger et. al. ·
REMARK in the following codons:
REMARK 243 Pro - Arg
REMARK 337 lle - Thr
REMARK 451 Leu - Phe
REMARK as reported by Sakurai et. al.
REMARK note also correction of initiation codon,
REMARK yielding a polypeptide of 461 amino acids

JRNL AUTH A.SAKURAI,A.NAKAI,L.J.DEGROOT
JRNL TITL STRUCTURAL ANALYSIS OF HUMAN THYROID HORMONE RECEPTOR
JRNL TITL2 BETA GENE
JRNL REF MOL.CELL.ENDO.   V.71   1990
JRNL AUTH C.WEINBERGER, C.C.THOMPSON,R.LEBO,D.J.GRUOL,R.M.EVANS
JRNL TITL THE C-ERB-A GENE ENCODES A THYROID HORMONE RECEPTOR
JRNL REF   NATURE   V.324 6098 1986

ATOM	1	CB	ALA	199	31.247	28.289	43.613	1.00	71.30	PROT
ATOM	2	C	ALA	199	32.916	26.485	44.170	1.00	68.99	PROT
ATOM	3	O	ALA	199	33.485	25.410	43.976	1.00	63.84	PROT
ATOM	4	N	ALA	199	30.462	25.993	44.096	1.00	75.00	PROT
ATOM	5	CA	ALA	199	31.571	26.795	43.497	1.00	73.24	PROT
ATOM	6	N	ALA	200	33.419	27.432	44.958	1.00	73.81	PROT
ATOM	7	CA	ALA	200	34.686	27.251	45.658	1.00	67.87	PROT
ATOM	8	CB	ALA	200	35.182	28.583	46.203	1.00	62.83	PROT
ATOM	9	C	ALA	200	34.539	26.239	46.791	1.00	63.23	PROT

ATOM	10	O	ALA	200	35.486	25.986	47.534	1.00	59.14	PROT
ATOM	11	N	ALA	201	33.345	25.670	46.932	1.00	56.98	PROT
ATOM	12	CA	ALA	201	33.117	24.664	47.957	1.00	51.46	PROT
ATOM	13	CB	ALA	201	31.776	23.992	47.744	1.00	40.35	PROT
ATOM	14	C	ALA	201	34.248	23.662	47.762	1.00	53.15	PROT
ATOM	15	O	ALA	201	34.624	22.938	48.679	1.00	54.90	PROT
ATOM	16	N	GLU	202	34.789	23.645	46.546	1.00	44.13	PROT
ATOM	17	CA	GLU	202	35.891	22.767	46.190	1.00	37.47	PROT
ATOM	18	CB	GLU	202	36.086	22.760	44.671	1.00	37.74	PROT
ATOM	19	CG	GLU	202	37.060	21.702	44.173	1.00	57.14	PROT
ATOM	20	CD	GLU	202	36.457	20.303	44.140	1.00	61.74	PROT
ATOM	21	OE1	GLU	202	35.211	20.175	44.133	1.00	63.81	PROT
ATOM	22	OE2	GLU	202	37.236	19.327	44.115	1.00	65.54	PROT
ATOM	23	C	GLU	202	37.156	23.266	46.878	1.00	35.54	PROT
ATOM	24	O	GLU	202	37.874	22.492	47.510	1.00	32.70	PROT
ATOM	25	N	GLU	203	37.415	24.566	46.755	1.00	31.79	PROT
ATOM	26	CA	GLU	203	38.588	25.188	47.366	1.00	33.63	PROT
ATOM	27	CB	GLU	203	38.603	26.683	47.079	1.00	28.28	PROT
ATOM	28	C	GLU	203	38.588	24.948	48.869	1.00	33.86	PROT
ATOM	29	O	GLU	203	39.644	24.818	49.485	1.00	33.10	PROT
ATOM	30	N	LEU	204	37.393	24.898	49.451	1.00	34.15	PROT
ATOM	31	CA	LEU	204	37.244	24.650	50.876	1.00	33.22	PROT
ATOM	32	CB	LEU	204	35.853	25.081	51.353	1.00	30.47	PROT
ATOM	33	CG	LEU	204	35.567	25.083	52.862	1.00	23.17	PROT
ATOM	34	CD1	LEU	204	35.904	26.439	53.443	1.00	5.41	PROT
ATOM	35	CD2	LEU	204	34.106	24.748	53.111	1.00	12.70	PROT
ATOM	36	C	LEU	204	37.424	23.156	51.100	1.00	40.17	PROT
ATOM	37	O	LEU	204	38.219	22.736	51.951	1.00	45.33	PROT
ATOM	38	N	GLN	205	36.682	22.360	50.329	1.00	43.86	PROT
ATOM	39	CA	GLN	205	36.754	20.899	50.415	1.00	43.96	PROT
ATOM	40	CB	GLN	205	36.089	20.261	49.184	1.00	45.56	PROT
ATOM	41	CG	GLN	205	34.562	20.195	49.245	1.00	42.39	PROT
ATOM	42	CD	GLN	205	34.022	18.775	49.159	1.00	46.79	PROT
ATOM	43	OE1	GLN	205	33.258	18.444	48.252	1.00	38.84	PROT
ATOM	44	NE2	GLN	205	34.412	17.932	50.109	1.00	37.95	PROT
ATOM	45	C	GLN	205	38.224	20.482	50.483	1.00	42.39	PROT
ATOM	46	O	GLN	205	38.630	19.702	51.355	1.00	36.27	PROT
ATOM	47	N	LYS	206	39.014	21.015	49.553	1.00	42.37	PROT
ATOM	48	CA	LYS	206	40.440	20.729	49.505	1.00	44.40	PROT
ATOM	49	CB	LYS	206	41.110	21.531	48.385	1.00	38.73	PROT
ATOM	50	C	LYS	206	41.024	21.118	50.853	1.00	42.36	PROT
ATOM	51	O	LYS	206	41.550	20.271	51.570	1.00	46.93	PROT
ATOM	52	N	SER	207	40.913	22.401	51.192	1.00	34.68	PROT
ATOM	53	CA	SER	207	41.415	22.933	52.455	1.00	29.43	PROT
ATOM	54	CB	SER	207	40.690	24.228	52.791	1.00	24.63	PROT
ATOM	55	OG	SER	207	41.327	25.332	52.173	1.00	36.56	PROT

ATOM	56	C	SER	207	41.254	21.958	53.614	1.00	29.20	PROT
ATOM	57	O	SER	207	42.223	21.623	54.293	1.00	31.01	PROT
ATOM	58	N	ILE	208	40.028	21.504	53.841	1.00	22.55	PROT
ATOM	59	CA	ILE	208	39.777	20.568	54.928	1.00	27.93	PROT
ATOM	60	CB	ILE	208	38.267	20.216	55.027	1.00	39.85	PROT
ATOM	61	CG2	ILE	208	38.062	18.895	55.769	1.00	32.13	PROT
ATOM	62	CG1	ILE	208	37.528	21.340	55.753	1.00	37.63	PROT
ATOM	63	CD1	ILE	208	36.788	22.296	54.827	1.00	41.47	PROT
ATOM	64	C	ILE	208	40.591	19.291	54.725	1.00	29.61	PROT
ATOM	65	O	ILE	208	40.905	18.580	55.679	1.00	40.00	PROT
ATOM	66	N	GLY	209	40.928	19.002	53.475	1.00	35.05	PROT
ATOM	67	CA	GLY	209	41.698	17.809	53.181	1.00	31.94	PROT
ATOM	68	C	GLY	209	40.826	16.695	52.643	1.00	28.66	PROT
ATOM	69	O	GLY	209	41.257	15.553	52.532	1.00	19.46	PROT
ATOM	70	N	HIS	210	39.586	17.021	52.313	1.00	20.47	PROT
ATOM	71	CA	HIS	210	38.684	16.018	51.774	1.00	26.99	PROT
ATOM	72	CB	HIS	210	37.240	16.451	52.012	1.00	37.16	PROT
ATOM	73	C	HIS	210	38.959	15.806	50.266	1.00	27.75	PROT
ATOM	74	O	HIS	210	39.328	16.741	49.550	1.00	34.08	PROT
ATOM	75	N	LYS	211	38.807	14.566	49.805	1.00	16.50	PROT
ATOM	76	CA	LYS	211	39.019	14.206	48.403	1.00	5.57	PROT
ATOM	77	CB	LYS	211	39.932	12.981	48.295	1.00	5.67	PROT
ATOM	78	CG	LYS	211	41.370	13.208	48.742	1.00	7.30	PROT
ATOM	79	CD	LYS	211	41.873	14.594	48.347	1.00	14.34	PROT
ATOM	80	CE	LYS	211	43.339	14.556	47.897	1.00	29.48	PROT
ATOM	81	NZ	LYS	211	43.777	15.851	47.262	1.00	33.43	PROT
ATOM	82	C	LYS	211	37.642	13.861	47.876	1.00	2.73	PROT
ATOM	83	O	LYS	211	37.176	12.741	48.039	1.00	6.57	PROT
ATOM	84	N	PRO	212	36.983	14.813	47.208	1.00	2.00	PROT
ATOM	85	CD	PRO	212	37.472	16.156	46.846	1.00	10.43	PROT
ATOM	86	CA	PRO	212	35.642	14.542	46.689	1.00	2.05	PROT
ATOM	87	CB	PRO	212	35.088	15.928	46.341	1.00	10.09	PROT
ATOM	88	CG	PRO	212	36.240	16.888	46.422	1.00	8.43	PROT
ATOM	89	C	PRO	212	35.523	13.578	45.520	1.00	2.00	PROT
ATOM	90	O	PRO	212	36.344	13.554	44.611	1.00	6.04	PROT
ATOM	91	N	GLU	213	34.476	12.773	45.577	1.00	2.68	PROT
ATOM	92	CA	GLU	213	34.181	11.817	44.542	1.00	6.81	PROT
ATOM	93	CB	GLU	213	33.539	10.594	45.173	1.00	7.20	PROT
ATOM	94	CG	GLU	213	34.222	10.232	46.462	1.00	15.33	PROT
ATOM	95	CD	GLU	213	34.293	8.743	46.689	1.00	21.36	PROT
ATOM	96	OE1	GLU	213	33.334	8.051	46.290	1.00	29.32	PROT
ATOM	97	OE2	GLU	213	35.301	8.265	47.268	1.00	28.50	PROT
ATOM	98	C	GLU	213	33.229	12.543	43.584	1.00	12.00	PROT
ATOM	99	O	GLU	213	32.693	13.599	43.926	1.00	19.02	PROT
ATOM	100	N	PRO	214	33.011	11.985	42.375	1.00	25.74	PROT
ATOM	101	CD	PRO	214	33.592	10.692	41.973	1.00	28.98	PROT

ATOM	102	CA	PRO	214	32.145	12.536	41.322	1.00	23.38	PROT
ATOM	103	CB	PRO	214	32.180	11.476	40.232	1.00	18.01	PROT
ATOM	104	CG	PRO	214	33.376	10.665	40.514	1.00	27.50	PROT
ATOM	105	C	PRO	214	30.715	12.828	41.734	1.00	25.02	PROT
ATOM	106	O	PRO	214	30.069	11.986	42.355	1.00	31.17	PROT
ATOM	107	N-	THR	215	30.211	14.009	41.377	1.00	19.56	PROT
ATOM	108	CA	THR	215	28.830	14.352	41.714	1.00	24.48	PROT
ATOM	109	CB	THR	215	28.535	15.841	41.522	1.00	27.13	PROT
ATOM	110	OG1	THR	215	27.939	16.038	40.234	1.00	40.19	PROT
ATOM	111	CG2	THR	215	29.805	16.659	41.640	1.00	30.81	PROT
ATOM	112	C	THR	215	27.899	13.562	40.805	1.00	22.14	PROT
ATOM	113	O	THR	215	28.357	12.905	39.883	1.00	27.52	PROT
ATOM	114	N	ASP	216	26.599	13.617	41.072	1.00	35.65	PROT
ATOM	115	CA	ASP	216	25.631	12.890	40.258	1.00	41.16	PROT
ATOM	116	CB	ASP	216	24.219	13.091	40.810	1.00	38.17	PROT
ATOM	117	C	ASP	216	25.714	13.370	38.810	1.00	40.44	PROT
ATOM	118	O	ASP	216	25.683	12.569	37.874	1.00	38.26	PROT
ATOM	119	N	GLU	217	25.832	14.682	38.635	1.00	40.14	PROT
ATOM	120	CA	GLU	217	25.932	15.275	37.305	1.00	38.89	PROT
ATOM	121	CB	GLU	217	25.883	16.796	37.413	1.00	29.95	PROT
ATOM	122	C	GLU	217	27.231	14.829	36.619	1.00	39.44	PROT
ATOM	123	O	GLU	217	27.245	14.525	35.425	1.00	40.08	PROT
ATOM	124	N	GLU	218	28.319	14.794	37.384	1.00	34.92	PROT
ATOM	125	CA	GLU	218	29.615	14.370	36.871	1.00	23.70	PROT
ATOM	126	CB	GLU	218	30.698	14.606	37.924	1.00	18.47	PROT
ATOM	127	CG	GLU	218	30.990	16.067	38.198	1.00	15.66	PROT
ATOM	128	CD	GLU	218	32.085	16.264	39.231	1.00	26.88	PROT
ATOM	129	OE1	GLU	218	32.164	15.458	40.191	1.00	25.07	PROT
ATOM	130	OE2	GLU	218	32.864	17.232	39.078	1.00	33.79	PROT
ATOM	131	C	GLU	218	29.589	12.892	36.491	1.00	21.05	PROT
ATOM	132	O	GLU	218	30.182	12.490	35.495	1.00	24.30	PROT
ATOM	133	N	TRP	219	28.907	12.080	37.288	1.00	13.98	PROT
ATOM	134	CA	TRP	219	28.829	10.660	37.000	1.00	17.30	PROT
ATOM	135	CB	TRP	219	28.052	9.921	38.089	1.00	16.27	PROT
ATOM	136	CG	TRP	219	28.890	9.520	39.277	1.00	31.14	PROT
ATOM	137	CD2	TRP	219	29.984	8.585	39.296	1.00	36.40	PROT
ATOM	138	CE2	TRP	219	30.476	8.547	40.621	1.00	29.24	PROT
ATOM	139	CE3	TRP	219	30.595	7.781	38.323	1.00	41.61	PROT
ATOM	140	CD1	TRP	219	28.771	9.988	40.551	1.00	28.69	PROT
ATOM	141	NE1	TRP	219	29.718	9.411	41.362	1.00	35.01	PROT
ATOM	142	CZ2	TRP	219	31.552	7.737	41.004	1.00	30.89	PROT
ATOM	143	CZ3	TRP	219	31.673	6.969	38.707	1.00	45.72	PROT
ATOM	144	CH2	TRP	219	32.137	6.958	40.038	1.00	35.17	PROT
ATOM	145	C	TRP	219	28.125	10.500	35.660	1.00	20.83	PROT
ATOM	146	O	TRP	219	28.467	9.616	34.865	1.00	31.36	PROT
ATOM	147	N	GLU	220	27.143	11.364	35.412	1.00	30.53	PROT

ATOM	148	CA	GLU	220	26.400	11.323	34.159	1.00 33.95	PROT
ATOM	149	CB	GLU	220	25.237	12.318	34.201	1.00 22.17	PROT
ATOM	150	C	GLU	220	27.356	11.658	33.013	1.00 34.66	PROT
ATOM	151	O	GLU	220	27.233	11.134	31.900	1.00 43.86	PROT
ATOM	152	N	LEU	221	28.320	12.528	33.297	1.00 22.60	PROT
ATOM	153	CA	LEU	221	29.305	12.926	32.304	1.00 17.18	PROT
ATOM	154	CB	LEU	221	29.995	14.219	32.743	1.00 11.03	PROT
ATOM	155	CG	LEU	221	31.078	14.824	31.850	1.00 5.17	PROT
ATOM	156	CD1	LEU	221	30.756	14.569	30.415	1.00 6.41	PROT
ATOM	157	CD2	LEU	221	31.181	16.305	32.092	1.00 10.65	PROT
ATOM	158	C	LEU	221	30.344	11.817	32.122	1.00 22.25	PROT
ATOM	159	O	LEU	221	30.759	11.521	31.002	1.00 18.99	PROT
ATOM	160	N	ILE	222	30.754	11.198	33.228	1.00 20.74	PROT
ATOM	161	CA	ILE	222	31.744	10.136	33.177	1.00 12.88	PROT
ATOM	162	CB	ILE	222	32.115	9.662	34.587	1.00 12.96	PROT
ATOM	163	CG2	ILE	222	33.030	8.468	34.515	1.00 2.00	PROT
ATOM	164	CG1	ILE	222	32.811	10.796	35.332	1.00 16.50	PROT
ATOM	165	CD1	ILE	222	33.625	10.351	36.511	1.00 15.90	PROT
ATOM	166	C	ILE	222	31.241	8.958	32.363	1.00 17.72	PROT
ATOM	167	O	ILE	222	32.001	8.363	31.594	1.00 16.59	PROT
ATOM	168	N	LYS	223	29.966	8.618	32.530	1.00 33.88	PROT
ATOM	169	CA	LYS	223	29.371	7.503	31.795	1.00 39.02	PROT
ATOM	170	CB	LYS	223	27.908	7.307	32.224	1.00 40.29	PROT
ATOM	171	C	LYS	223	29.444	7.779	30.293	1.00 39.14	PROT
ATOM	172	O	LYS	223	29.949	6.963	29.517	1.00 32.99	PROT
ATOM	173	N	THR	224	28.936	8.942	29.897	1.00 27.19	PROT
ATOM	174	CA	THR	224	28.929	9.363	28.498	1.00 25.75	PROT
ATOM	175	CB	THR	224	28.440	10.817	28.407	1.00 22.51	PROT
ATOM	176	OG1	THR	224	27.018	10.837	28.568	1.00 35.46	PROT
ATOM	177	CG2	THR	224	28.799	11.436	27.083	1.00 15.53	PROT
ATOM	178	C	THR	224	30.307	9.235	27.833	1.00 22.31	PROT
ATOM	179	O	THR	224	30.480	8.517	26.843	1.00 27.13	PROT
ATOM	180	N	VAL	225	31.287	9.936	28.386	1.00 17.87	PROT
ATOM	181	CA	VAL	225	32.635	9.906	27.854	1.00 17.07	PROT
ATOM	182	CB	VAL	225	33.559	10.759	28.720	1.00 16.86	PROT
ATOM	183	CG1	VAL	225	34.845	11.064	27.973	1.00 26.54	PROT
ATOM	184	CG2	VAL	225	32.854	12.057	29.075	1.00 24.46	PROT
ATOM	185	C	VAL	225	33.169	8.486	27.793	1.00 16.11	PROT
ATOM	186	O	VAL	225	33.683	8.042	26.763	1.00 12.75	PROT
ATOM	187	N	THR	226	33.040	7.769	28.900	1.00 12.23	PROT
ATOM	188	CA	THR	226	33.520	6.400	28.951	1.00 12.34	PROT
ATOM	189	CB	THR	226	33.175	5.747	30.271	1.00 17.01	PROT
ATOM	190	OG1	THR	226	33.715	6.536	31.342	1.00 6.78	PROT
ATOM	191	CG2	THR	226	33.739	4.324	30.307	1.00 2.00	PROT
ATOM	192	C	THR	226	32.909	5.581	27.837	1.00 14.82	PROT
ATOM	193	O	THR	226	33.623	4.953	27.061	1.00 20.90	PROT

ATOM	194	N	GLU	227	31.582	5.588	27.758	1.00	22.90	PROT
ATOM	195	CA	GLU	227	30.886	4.849	26.714	1.00	22.63	PROT
ATOM	196	CB	GLU	227	29.417	5.248	26.678	1.00	20.14	PROT
ATOM	197	C	GLU	227	31.556	5.173	25.386	1.00	21.74	PROT
ATOM	198	O	GLU	227	32.057	4.283	24.700	1.00	24.42	PROT
ATOM	199	N.	ALA	228	31.590	6.460	25.050	1.00	13.26	PROT
ATOM	200	CA	ALA	228	32.196	6.928	23.800	1.00	22.76	PROT
ATOM	201	CB	ALA	228	32.267	8.450	23.785	1.00	22.50	PROT
ATOM	202	C	ALA	228	33.584	6.358	23.538	1.00	19.19	PROT
ATOM	203	O	ALA	228	33.913	6.003	22.408	1.00	17.19	PROT
ATOM	204	N	HIS	229	34.408	6.290	24.573	1.00	20.11	PROT
ATOM	205	CA	HIS	229	35.741	5.756	24.389	1.00	18.68	PROT
ATOM	206	CB	HIS	229	36.537	5.819	25.686	1.00	10.37	PROT
ATOM	207	CG	HIS	229	37.894	5.201	25.586	1.00	2.00	PROT
ATOM	208	CD2	HIS	229	38.524	4.299	26.376	1.00	7.61	PROT
ATOM	209	ND1	HIS	229	38.780	5.517	24.582	1.00	3.78	PROT
ATOM	210	CE1	HIS	229	39.900	4.837	24.758	1.00	15.67	PROT
ATOM	211	NE2	HIS	229	39.771	4.090	25.840	1.00	7.10	PROT
ATOM	212	C	HIS	229	35.637	4.316	23.940	1.00	21.45	PROT
ATOM	213	O	HIS	229	36.127	3.950	22.866	1.00	22.42	PROT
ATOM	214	N	VAL	230	34.983	3.505	24.762	1.00	21.64	PROT
ATOM	215	CA	VAL	230	34.827	2.086	24.468	1.00	33.80	PROT
ATOM	216	CB	VAL	230	33.960	1.388	25.528	1.00	33.11	PROT
ATOM	217	CG1	VAL	230	34.251	-0.106	25.515	1.00	33.80	PROT
ATOM	218	CG2	VAL	230	34.228	1.985	26.896	1.00	26.54	PROT
ATOM	219	C	VAL	230	34.224	1.781	23.100	1.00	33.12	PROT
ATOM	220	O	VAL	230	34.703	0.897	22.385	1.00	40.80	PROT
ATOM	221	N	ALA	231	33.170	2.507	22.746	1.00	36.22	PROT
ATOM	222	CA	ALA	231	32.497	2.298	21.471	1.00	36.24	PROT
ATOM	223	CB	ALA	231	31.318	3.255	21.343	1.00	18.90	PROT
ATOM	224	C	ALA	231	33.445	2.501	20.303	1.00	37.54	PROT
ATOM	225	O	ALA	231	33.342	1.816	19.285	1.00	35.93	PROT
ATOM	226	N	THR	232	34.380	3.434	20.474	1.00	23.74	PROT
ATOM	227	CA	THR	232	35.329	3.789	19.432	1.00	15.54	PROT
ATOM	228	CB	THR	232	35.335	5.321	19.238	1.00	9.70	PROT
ATOM	229	OG1	THR	232	35.733	5.949	20.460	1.00	16.73	PROT
ATOM	230	CG2	THR	232	33.942	5.828	18.891	1.00	2.00	PROT
ATOM	231	C	THR	232	36.758	3.309	19.670	1.00	19.86	PROT
ATOM	232	O	THR	232	37.695	3.854	19.094	1.00	15.31	PROT
ATOM	233	N	ASN	233	36.938	2.305	20.523	1.00	28.26	PROT
ATOM	234	CA	ASN	233	38.280	1.771	20.772	1.00	39.32	PROT
ATOM	235	CB	ASN	233	38.435	1.343	22.234	1.00	47.14	PROT
ATOM	236	CG	ASN	233	39.804	1.689	22.801	1.00	54.02	PROT
ATOM	237	OD1	ASN	233	40.633	2.303	22.128	1.00	60.36	PROT
ATOM	238	ND2	ASN	233	40.045	1.296	24.045	1.00	48.67	PROT
ATOM	239	C	ASN	233	38.507	0.574	19.840	1.00	49.33	PROT

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ATOM   240 O   ASN  233    38.338  0.693 18.625 1.00 65.36    PROT
ATOM   241 N   ALA  234    38.877 -0.577 20.388 1.00 57.89    PROT
ATOM   242 CA  ALA  234    39.090 -1.752 19.552 1.00 57.22    PROT
ATOM   243 CB  ALA  234    40.372 -1.595 18.754 1.00 48.03    PROT
ATOM   244 C   ALA  234    39.141 -3.027 20.384 1.00 62.42    PROT
ATOM   245 O.  ALA  234    38.471 -3.073 21.440 1.00 56.93    PROT
ATOM   246 OT  ALA  234    39.853 -3.968 19.965 1.00 76.16    PROT
ATOM   247 N   TRP  239    41.987 -7.449 22.970 1.00 58.82    PROT
ATOM   248 CA  TRP  239    43.077 -6.886 22.154 1.00 51.37    PROT
ATOM   249 CB  TRP  239    43.325 -5.406 22.534 1.00 45.12    PROT
ATOM   250 CG  TRP  239    44.193 -5.170 23.760 1.00 43.09    PROT
ATOM   251 CD2 TRP  239    45.617 -5.037 23.793 1.00 32.36    PROT
ATOM   252 CE2 TRP  239    45.990 -4.872 25.142 1.00 28.37    PROT
ATOM   253 CE3 TRP  239    46.615 -5.049 22.813 1.00 40.79    PROT
ATOM   254 CD1 TRP  239    43.773 -5.073 25.059 1.00 46.63    PROT
ATOM   255 NE1 TRP  239    44.847 -4.896 25.893 1.00 27.08    PROT
ATOM   256 CZ2 TRP  239    47.315 -4.717 25.535 1.00 35.48    PROT
ATOM   257 CZ3 TRP  239    47.936 -4.896 23.204 1.00 40.18    PROT
ATOM   258 CH2 TRP  239    48.273 -4.733 24.554 1.00 49.93    PROT
ATOM   259 C   TRP  239    44.422 -7.623 22.063 1.00 49.76    PROT
ATOM   260 O   TRP  239    44.944 -7.799 20.962 1.00 48.14    PROT
ATOM   261 N   LYS  240    44.975 -8.048 23.198 1.00 38.92    PROT
ATOM   262 CA  LYS  240    46.263 -8.735 23.232 1.00 37.29    PROT
ATOM   263 CB  LYS  240    46.572 -9.196 24.657 1.00 38.79    PROT
ATOM   264 CG  LYS  240    47.106 -8.099 25.571 1.00 38.43    PROT
ATOM   265 CD  LYS  240    48.307 -8.584 26.370 1.00 35.71    PROT
ATOM   266 CE  LYS  240    48.631 -7.646 27.523 1.00 37.87    PROT
ATOM   267 NZ  LYS  240    49.058 -8.377 28.750 1.00 28.85    PROT
ATOM   268 C   LYS  240    46.404 -9.914 22.269 1.00 42.18    PROT
ATOM   269 O   LYS  240    47.491 -10.132 21.732 1.00 45.89    PROT
ATOM   270 N   GLN  241    45.331 -10.679 22.058 1.00 46.08    PROT
ATOM   271 CA  GLN  241    45.390 -11.816 21.133 1.00 45.02    PROT
ATOM   272 CB  GLN  241    44.575 -13.011 21.638 1.00 46.30    PROT
ATOM   273 CG  GLN  241    44.284 -13.018 23.116 1.00 60.38    PROT
ATOM   274 CD  GLN  241    42.828 -13.312 23.408 1.00 63.76    PROT
ATOM   275 OE1 GLN  241    42.154 -13.988 22.631 1.00 66.34    PROT
ATOM   276 NE2 GLN  241    42.333 -12.801 24.531 1.00 69.18    PROT
ATOM   277 C   GLN  241    44.866 -11.405 19.764 1.00 45.77    PROT
ATOM   278 O   GLN  241    45.107 -12.085 18.765 1.00 51.18    PROT
ATOM   279 N   LYS  242    44.132 -10.300 19.723 1.00 42.04    PROT
ATOM   280 CA  LYS  242    43.613 -9.794 18.464 1.00 48.33    PROT
ATOM   281 CB  LYS  242    42.498 -8.786 18.727 1.00 40.17    PROT
ATOM   282 C   LYS  242    44.796 -9.123 17.742 1.00 53.04    PROT
ATOM   283 O   LYS  242    44.709 -8.753 16.565 1.00 48.21    PROT
ATOM   284 N   ARG  243    45.906 -8.992 18.470 1.00 45.44    PROT
ATOM   285 CA  ARG  243    47.128 -8.374 17.965 1.00 43.53    PROT
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ATOM	286	CB	ARG	243	48.108	-8.135	19.118	1.00 40.21	PROT
ATOM	287	C	ARG	243	47.795	-9.220	16.892	1.00 45.96	PROT
ATOM	288	O	ARG	243	47.684	-10.443	16.894	1.00 50.22	PROT
ATOM	289	N	LYS	244	48.498	-8.551	15.982	1.00 52.12	PROT
ATOM	290	CA	LYS	244	49.202	-9.202	14.879	1.00 45.30	PROT
ATOM	291	CB	LYS	244	48.466	-8.950	13.558	1.00 48.24	PROT
ATOM	292	CG	LYS	244	47.109	-9.631	13.446	1.00 53.78	PROT
ATOM	293	CD	LYS	244	46.835	-10.078	12.011	1.00 60.50	PROT
ATOM	294	CE	LYS	244	46.038	-9.030	11.241	1.00 61.03	PROT
ATOM	295	NZ	LYS	244	45.455	-7.997	12.146	1.00 55.25	PROT
ATOM	296	C	LYS	244	50.616	-8.641	14.786	1.00 40.33	PROT
ATOM	297	O	LYS	244	50.849	-7.629	14.125	1.00 36.07	PROT
ATOM	298	N	PHE	245	51.556	-9.312	15.445	1.00 27.87	PROT
ATOM	299	CA	PHE	245	52.949	-8.885	15.461	1.00 30.61	PROT
ATOM	300	CB	PHE	245	53.784	-9.887	16.253	1.00 20.28	PROT
ATOM	301	CG	PHE	245	53.454	-9.922	17.713	1.00 37.23	PROT
ATOM	302	CD1	PHE	245	52.636	-10.917	18.234	1.00 40.93	PROT
ATOM	303	CD2	PHE	245	53.958	-8.959	18.577	1.00 41.60	PROT
ATOM	304	CE1	PHE	245	52.326	-10.953	19.594	1.00 42.54	PROT
ATOM	305	CE2	PHE	245	53.652	-8.989	19.936	1.00 45.84	PROT
ATOM	306	CZ	PHE	245	52.835	-9.988	20.443	1.00 33.72	PROT
ATOM	307	C	PHE	245	53.549	-8.693	14.068	1.00 38.75	PROT
ATOM	308	O	PHE	245	53.794	-9.660	13.337	1.00 48.93	PROT
ATOM	309	N	LEU	246	53.789	-7.437	13.704	1.00 41.18	PROT
ATOM	310	CA	LEU	246	54.362	-7.124	12.404	1.00 43.43	PROT
ATOM	311	CB	LEU	246	54.378	-5.612	12.181	1.00 42.78	PROT
ATOM	312	CG	LEU	246	54.535	-5.200	10.718	1.00 49.88	PROT
ATOM	313	CD1	LEU	246	53.528	-4.113	10.365	1.00 40.64	PROT
ATOM	314	CD2	LEU	246	55.966	-4.730	10.485	1.00 48.66	PROT
ATOM	315	C	LEU	246	55.777	-7.692	12.250	1.00 42.60	PROT
ATOM	316	O	LEU	246	56.677	-7.383	13.028	1.00 45.75	PROT
ATOM	317	N	PRO	247	55.977	-8.540	11.233	1.00 50.03	PROT
ATOM	318	CD	PRO	247	54.914	-8.924	10.286	1.00 60.17	PROT
ATOM	319	CA	PRO	247	57.237	-9.199	10.894	1.00 49.90	PROT
ATOM	320	CB	PRO	247	57.181	-9.282	9.369	1.00 59.51	PROT
ATOM	321	CG	PRO	247	55.678	-9.244	9.023	1.00 52.86	PROT
ATOM	322	C	PRO	247	58.499	-8.494	11.392	1.00 48.85	PROT
ATOM	323	O	PRO	247	58.675	-7.295	11.186	1.00 49.28	PROT
ATOM	324	N	GLU	248	59.379	-9.261	12.032	1.00 47.62	PROT
ATOM	325	CA	GLU	248	60.628	-8.733	12.574	1.00 51.41	PROT
ATOM	326	CB	GLU	248	61.266	-9.750	13.522	1.00 44.22	PROT
ATOM	327	C	GLU	248	61.623	-8.354	11.490	1.00 53.28	PROT
ATOM	328	O	GLU	248	62.815	-8.214	11.765	1.00 62.57	PROT
ATOM	329	N	ASP	249	61.146	-8.200	10.258	1.00 56.20	PROT
ATOM	330	CA	ASP	249	62.030	-7.818	9.164	1.00 55.88	PROT
ATOM	331	CB	ASP	249	62.231	-8.981	8.173	1.00 53.88	PROT

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ATOM   332 CG  ASP  249    60.928  -9.637   7.739  1.00 54.39    PROT
ATOM   333 OD1 ASP  249    60.578 -10.693   8.310  1.00 57.70    PROT
ATOM   334 OD2 ASP  249    60.264  -9.112   6.819  1.00 45.76    PROT
ATOM   335 C   ASP  249    61.539  -6.567   8.437  1.00 54.20    PROT
ATOM   336 O   ASP  249    62.119  -6.154   7.429  1.00 55.31    PROT
ATOM   337 N.  ILE  250    60.469  -5.965   8.954  1.00 46.13    PROT
ATOM   338 CA  ILE  250    59.933  -4.735   8.376  1.00 46.12    PROT
ATOM   339 CB  ILE  250    58.413  -4.764   8.253  1.00 43.38    PROT
ATOM   340 CG2 ILE  250    57.892  -3.344   8.057  1.00 39.15    PROT
ATOM   341 CG1 ILE  250    58.007  -5.654   7.074  1.00 48.96    PROT
ATOM   342 CD1 ILE  250    56.707  -6.401   7.283  1.00 43.14    PROT
ATOM   343 C   ILE  250    60.311  -3.590   9.294  1.00 45.32    PROT
ATOM   344 O   ILE  250    60.257  -3.724  10.513  1.00 43.74    PROT
ATOM   345 N   GLY  251    60.680  -2.459   8.711  1.00 36.80    PROT
ATOM   346 CA  GLY  251    61.091  -1.329   9.521  1.00 39.28    PROT
ATOM   347 C   GLY  251    62.370  -1.621  10.305  1.00 44.31    PROT
ATOM   348 O   GLY  251    62.538  -1.145  11.428  1.00 51.39    PROT
ATOM   349 N   GLN  252    63.277  -2.399   9.715  1.00 55.47    PROT
ATOM   350 CA  GLN  252    64.536  -2.745  10.374  1.00 54.24    PROT
ATOM   351 CB  GLN  252    64.792  -4.237  10.245  1.00 49.31    PROT
ATOM   352 C   GLN  252    65.720  -1.959   9.812  1.00 54.86    PROT
ATOM   353 O   GLN  252    65.492  -1.079   8.953  1.00 58.80    PROT
ATOM   354 CB  VAL  264    60.887   6.759   5.510  1.00 34.33    PROT
ATOM   355 CG1 VAL  264    59.550   6.086   5.790  1.00 34.34    PROT
ATOM   356 CG2 VAL  264    60.893   8.163   6.080  1.00 20.22    PROT
ATOM   357 C   VAL  264    62.053   4.557   5.439  1.00 34.08    PROT
ATOM   358 O   VAL  264    62.280   4.466   4.232  1.00 46.39    PROT
ATOM   359 N   VAL  264    63.361   6.605   5.966  1.00 21.27    PROT
ATOM   360 CA  VAL  264    62.041   5.920   6.122  1.00 29.68    PROT
ATOM   361 N   ASP  265    61.809   3.499   6.209  1.00 40.63    PROT
ATOM   362 CA  ASP  265    61.796   2.141   5.670  1.00 43.58    PROT
ATOM   363 CB  ASP  265    61.243   1.160   6.704  1.00 44.07    PROT
ATOM   364 CG  ASP  265    61.179  -0.262   6.185  1.00 49.19    PROT
ATOM   365 OD1 ASP  265    62.223  -0.945   6.175  1.00 57.67    PROT
ATOM   366 OD2 ASP  265    60.082  -0.702   5.789  1.00 54.75    PROT
ATOM   367 C   ASP  265    60.956   2.071   4.401  1.00 48.03    PROT
ATOM   368 O   ASP  265    61.362   1.458   3.411  1.00 57.44    PROT
ATOM   369 N   LEU  266    59.793   2.711   4.436  1.00 40.55    PROT
ATOM   370 CA  LEU  266    58.879   2.741   3.295  1.00 45.78    PROT
ATOM   371 CB  LEU  266    59.638   2.962   1.977  1.00 45.92    PROT
ATOM   372 CG  LEU  266    59.881   4.407   1.506  1.00 48.41    PROT
ATOM   373 CD1 LEU  266    59.934   4.432  -0.007  1.00 32.83    PROT
ATOM   374 CD2 LEU  266    58.787   5.344   2.012  1.00 45.08    PROT
ATOM   375 C   LEU  266    58.064   1.462   3.214  1.00 45.45    PROT
ATOM   376 O   LEU  266    56.862   1.503   2.949  1.00 42.92    PROT
ATOM   377 N   GLU  267    58.712   0.324   3.431  1.00 46.47    PROT
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ATOM	378	CA	GLU	267	57.986	-0.935	3.415	1.00 44.34	PROT
ATOM	379	CB	GLU	267	58.943	-2.123	3.505	1.00 39.42	PROT
ATOM	380	CG	GLU	267	58.291	-3.457	3.188	1.00 40.68	PROT
ATOM	381	CD	GLU	267	58.929	-4.607	3.943	1.00 63.54	PROT
ATOM	382	OE1	GLU	267	60.103	-4.470	4.361	1.00 68.92	PROT
ATOM	383	OE2	GLU	267	58.258	-5.650	4.120	1.00 66.66	PROT
ATOM	384	C	GLU	267	57.106	-0.880	4.655	1.00 41.57	PROT
ATOM	385	O	GLU	267	55.991	-1.398	4.673	1.00 48.68	PROT
ATOM	386	N	ALA	268	57.620	-0.215	5.686	1.00 39.33	PROT
ATOM	387	CA	ALA	268	56.916	-0.057	6.951	1.00 31.62	PROT
ATOM	388	CB	ALA	268	57.918	0.134	8.063	1.00 7.56	PROT
ATOM	389	C	ALA	268	55.960	1.135	6.888	1.00 25.96	PROT
ATOM	390	O	ALA	268	54.786	1.036	7.237	1.00 17.35	PROT
ATOM	391	N	PHE	269	56.464	2.274	6.446	1.00 11.34	PROT
ATOM	392	CA	PHE	269	55.615	3.453	6.335	1.00 15.72	PROT
ATOM	393	CB	PHE	269	56.274	4.474	5.405	1.00 20.08	PROT
ATOM	394	CG	PHE	269	55.552	5.788	5.334	1.00 24.67	PROT
ATOM	395	CD1	PHE	269	55.661	6.713	6.369	1.00 15.69	PROT
ATOM	396	CD2	PHE	269	54.772	6.111	4.222	1.00 20.64	PROT
ATOM	397	CE1	PHE	269	55.003	7.942	6.300	1.00 22.55	PROT
ATOM	398	CE2	PHE	269	54.108	7.342	4.143	1.00 19.77	PROT
ATOM	399	CZ	PHE	269	54.224	8.257	5.186	1.00 19.27	PROT
ATOM	400	C	PHE	269	54.277	3.010	5.754	1.00 19.45	PROT
ATOM	401	O	PHE	269	53.212	3.351	6.261	1.00 13.40	PROT
ATOM	402	N	SER	270	54.367	2.214	4.692	1.00 43.85	PROT
ATOM	403	CA	SER	270	53.217	1.686	3.967	1.00 46.67	PROT
ATOM	404	CB	SER	270	53.687	0.669	2.924	1.00 53.60	PROT
ATOM	405	OG	SER	270	52.662	0.382	1.988	1.00 68.82	PROT
ATOM	406	C	SER	270	52.181	1.039	4.865	1.00 43.32	PROT
ATOM	407	O	SER	270	51.024	1.459	4.893	1.00 43.87	PROT
ATOM	408	N	HIS	271	52.594	0.009	5.590	1.00 34.59	PROT
ATOM	409	CA	HIS	271	51.681	-0.694	6.486	1.00 37.12	PROT
ATOM	410	CB	HIS	271	52.441	-1.772	7.266	1.00 46.61	PROT
ATOM	411	CG	HIS	271	52.603	-3.056	6.512	1.00 63.99	PROT
ATOM	412	CD2	HIS	271	51.879	-4.201	6.533	1.00 62.06	PROT
ATOM	413	ND1	HIS	271	53.608	-3.256	5.590	1.00 60.86	PROT
ATOM	414	CE1	HIS	271	53.497	-4.467	5.075	1.00 60.70	PROT
ATOM	415	NE2	HIS	271	52.456	-5.061	5.630	1.00 64.10	PROT
ATOM	416	C	HIS	271	50.973	0.261	7.459	1.00 36.53	PROT
ATOM	417	O	HIS	271	49.744	0.245	7.586	1.00 37.75	PROT
ATOM	418	N	PHE	272	51.752	1.099	8.133	1.00 32.81	PROT
ATOM	419	CA	PHE	272	51.190	2.038	9.085	1.00 27.77	PROT
ATOM	420	CB	PHE	272	52.302	2.886	9.714	1.00 10.49	PROT
ATOM	421	CG	PHE	272	53.338	2.086	10.459	1.00 6.98	PROT
ATOM	422	CD1	PHE	272	54.671	2.478	10.449	1.00 4.13	PROT
ATOM	423	CD2	PHE	272	52.978	0.961	11.193	1.00 6.95	PROT

						X	Y	Z			
ATOM	424	CE1	PHE	272		55.634	1.764	11.163	1.00	7.86	PROT
ATOM	425	CE2	PHE	272		53.930	0.242	11.909	1.00	6.13	PROT
ATOM	426	CZ	PHE	272		55.263	0.645	11.895	1.00	8.93	PROT
ATOM	427	C	PHE	272		50.168	2.939	8.405	1.00	30.96	PROT
ATOM	428	O	PHE	272		49.071	3.156	8.931	1.00	30.21	PROT
ATOM	429	N	THR	273		50.522	3.452	7.231	1.00	31.55	PROT
ATOM	430	CA	THR	273		49.633	4.343	6.487	1.00	33.39	PROT
ATOM	431	CB	THR	273		50.335	4.912	5.243	1.00	36.80	PROT
ATOM	432	OG1	THR	273		50.649	3.847	4.332	1.00	27.42	PROT
ATOM	433	CG2	THR	273		51.613	5.641	5.656	1.00	32.25	PROT
ATOM	434	C	THR	273		48.350	3.647	6.056	1.00	34.07	PROT
ATOM	435	O	THR	273		47.362	4.294	5.697	1.00	17.11	PROT
ATOM	436	N	LYS	274		48.372	2.321	6.088	1.00	34.47	PROT
ATOM	437	CA	LYS	274		47.196	1.555	5.726	1.00	42.17	PROT
ATOM	438	CB	LYS	274		47.544	0.069	5.615	1.00	40.02	PROT
ATOM	439	C	LYS	274		46.153	1.778	6.818	1.00	41.47	PROT
ATOM	440	O	LYS	274		45.115	2.402	6.584	1.00	47.37	PROT
ATOM	441	N	ILE	275		46.456	1.290	8.019	1.00	34.08	PROT
ATOM	442	CA	ILE	275		45.559	1.403	9.166	1.00	25.49	PROT
ATOM	443	CB	ILE	275		45.991	0.435	10.262	1.00	19.72	PROT
ATOM	444	CG2	ILE	275		46.290	-0.934	9.642	1.00	23.39	PROT
ATOM	445	CG1	ILE	275		47.249	0.958	10.953	1.00	12.96	PROT
ATOM	446	CD1	ILE	275		47.970	-0.103	11.769	1.00	11.07	PROT
ATOM	447	C	ILE	275		45.440	2.805	9.762	1.00	20.03	PROT
ATOM	448	O	ILE	275		44.541	3.081	10.547	1.00	18.98	PROT
ATOM	449	N	ILE	276		46.347	3.694	9.402	1.00	8.88	PROT
ATOM	450	CA	ILE	276		46.268	5.043	9.924	1.00	6.62	PROT
ATOM	451	CB	ILE	276		47.298	5.972	9.261	1.00	21.77	PROT
ATOM	452	CG2	ILE	276		46.894	6.267	7.831	1.00	27.28	PROT
ATOM	453	CG1	ILE	276		47.374	7.288	10.028	1.00	6.75	PROT
ATOM	454	CD1	ILE	276		48.349	7.255	11.153	1.00	15.44	PROT
ATOM	455	C	ILE	276		44.887	5.649	9.697	1.00	12.17	PROT
ATOM	456	O	ILE	276		44.349	6.331	10.565	1.00	29.36	PROT
ATOM	457	N	THR	277		44.303	5.411	8.535	1.00	22.12	PROT
ATOM	458	CA	THR	277		43.007	6.005	8.260	1.00	27.16	PROT
ATOM	459	CB	THR	277		42.532	5.675	6.834	1.00	27.11	PROT
ATOM	460	OG1	THR	277		43.665	5.584	5.955	1.00	22.55	PROT
ATOM	461	CG2	THR	277		41.594	6.763	6.337	1.00	26.98	PROT
ATOM	462	C	THR	277		41.944	5.591	9.270	1.00	25.23	PROT
ATOM	463	O	THR	277		41.271	6.443	9.847	1.00	21.62	PROT
ATOM	464	N	PRO	278		41.769	4.279	9.491	1.00	18.64	PROT
ATOM	465	CD	PRO	278		42.472	3.167	8.832	1.00	9.52	PROT
ATOM	466	CA	PRO	278		40.765	3.803	10.453	1.00	18.48	PROT
ATOM	467	CB	PRO	278		40.907	2.280	10.415	1.00	14.77	PROT
ATOM	468	CG	PRO	278		42.195	2.008	9.738	1.00	7.70	PROT
ATOM	469	C	PRO	278		40.956	4.356	11.870	1.00	25.40	PROT

ATOM	470	O	PRO	278	39.983	4.628	12.576	1.00	22.33	PROT
ATOM	471	N	ALA	279	42.211	4.507	12.285	1.00	22.14	PROT
ATOM	472	CA	ALA	279	42.519	5.038	13.607	1.00	20.26	PROT
ATOM	473	CB	ALA	279	44.016	5.033	13.831	1.00	13.33	PROT
ATOM	474	C	ALA	279	41.984	6.456	13.699	1.00	16.49	PROT
ATOM	475	O.	ALA	279	41.222	6.797	14.598	1.00	32.38	PROT
ATOM	476	N	ILE	280	42.384	7.286	12.753	1.00	7.56	PROT
ATOM	477	CA	ILE	280	41.935	8.666	12.734	1.00	9.96	PROT
ATOM	478	CB	ILE	280	42.422	9.380	11.462	1.00	8.46	PROT
ATOM	479	CG2	ILE	280	42.172	10.871	11.581	1.00	2.00	PROT
ATOM	480	CG1	ILE	280	43.901	9.059	11.220	1.00	10.96	PROT
ATOM	481	CD1	ILE	280	44.615	10.036	10.294	1.00	8.54	PROT
ATOM	482	C	ILE	280	40.410	8.805	12.805	1.00	15.46	PROT
ATOM	483	O	ILE	280	39.887	9.741	13.421	1.00	24.39	PROT
ATOM	484	N	THR	281	39.692	7.883	12.172	1.00	24.18	PROT
ATOM	485	CA	THR	281	38.238	7.962	12.153	1.00	24.77	PROT
ATOM	486	CB	THR	281	37.650	6.952	11.145	1.00	33.90	PROT
ATOM	487	OG1	THR	281	38.607	6.711	10.108	1.00	34.62	PROT
ATOM	488	CG2	THR	281	36.379	7.506	10.513	1.00	39.80	PROT
ATOM	489	C	THR	281	37.655	7.726	13.535	1.00	23.39	PROT
ATOM	490	O	THR	281	36.733	8.422	13.960	1.00	19.51	PROT
ATOM	491	N	ARG	282	38.213	6.743	14.234	1.00	16.90	PROT
ATOM	492	CA	ARG	282	37.781	6.404	15.583	1.00	12.29	PROT
ATOM	493	CB	ARG	282	38.641	5.260	16.115	1.00	5.36	PROT
ATOM	494	CG	ARG	282	37.936	3.926	16.136	1.00	17.05	PROT
ATOM	495	CD	ARG	282	38.296	3.095	14.942	1.00	18.41	PROT
ATOM	496	NE	ARG	282	39.622	2.475	15.011	1.00	35.77	PROT
ATOM	497	CZ	ARG	282	40.454	2.501	16.055	1.00	36.80	PROT
ATOM	498	NH1	ARG	282	41.629	1.888	15.967	1.00	35.96	PROT
ATOM	499	NH2	ARG	282	40.134	3.120	17.183	1.00	25.20	PROT
ATOM	500	C	ARG	282	37.863	7.626	16.520	1.00	16.75	PROT
ATOM	501	O	ARG	282	37.078	7.758	17.456	1.00	22.98	PROT
ATOM	502	N	VAL	283	38.813	8.518	16.268	1.00	11.92	PROT
ATOM	503	CA	VAL	283	38.937	9.719	17.083	1.00	14.68	PROT
ATOM	504	CB	VAL	283	40.191	10.541	16.696	1.00	23.35	PROT
ATOM	505	CG1	VAL	283	40.467	11.593	17.752	1.00	11.98	PROT
ATOM	506	CG2	VAL	283	41.396	9.621	16.526	1.00	20.41	PROT
ATOM	507	C	VAL	283	37.705	10.580	16.833	1.00	12.72	PROT
ATOM	508	O	VAL	283	36.965	10.929	17.752	1.00	20.37	PROT
ATOM	509	N	VAL	284	37.503	10.920	15.567	1.00	18.28	PROT
ATOM	510	CA	VAL	284	36.369	11.727	15.150	1.00	16.98	PROT
ATOM	511	CB	VAL	284	36.251	11.765	13.602	1.00	27.40	PROT
ATOM	512	CG1	VAL	284	35.434	12.973	13.172	1.00	19.30	PROT
ATOM	513	CG2	VAL	284	37.649	11.794	12.959	1.00	16.94	PROT
ATOM	514	C	VAL	284	35.113	11.093	15.715	1.00	14.89	PROT
ATOM	515	O	VAL	284	34.233	11.781	16.219	1.00	10.93	PROT

ATOM	516	N	ASP	285	35.046	9.768	15.623	1.00	10.68	PROT
ATOM	517	CA	ASP	285	33.898	9.022	16.114	1.00	20.76	PROT
ATOM	518	CB	ASP	285	34.079	7.518	15.874	1.00	22.99	PROT
ATOM	519	CG	ASP	285	33.985	7.130	14.397	1.00	30.01	PROT
ATOM	520	OD1	ASP	285	33.185	7.735	13.648	1.00	18.56	PROT
ATOM	521	OD2	ASP	285	34.720	6.202	13.993	1.00	27.74	PROT
ATOM	522	C	ASP	285	33.734	9.274	17.604	1.00	26.87	PROT
ATOM	523	O	ASP	285	32.609	9.349	18.103	1.00	39.89	PROT
ATOM	524	N	PHE	286	34.861	9.405	18.308	1.00	25.45	PROT
ATOM	525	CA	PHE	286	34.862	9.654	19.746	1.00	15.66	PROT
ATOM	526	CB	PHE	286	36.284	9.533	20.305	1.00	7.30	PROT
ATOM	527	CG	PHE	286	36.454	10.104	21.703	1.00	17.92	PROT
ATOM	528	CD1	PHE	286	35.848	9.499	22.805	1.00	19.35	PROT
ATOM	529	CD2	PHE	286	37.229	11.245	21.920	1.00	19.24	PROT
ATOM	530	CE1	PHE	286	36.014	10.021	24.087	1.00	9.94	PROT
ATOM	531	CE2	PHE	286	37.395	11.769	23.207	1.00	11.33	PROT
ATOM	532	CZ	PHE	286	36.786	11.154	24.283	1.00	2.00	PROT
ATOM	533	C	PHE	286	34.313	11.043	20.030	1.00	17.67	PROT
ATOM	534	O	PHE	286	33.367	11.201	20.797	1.00	14.36	PROT
ATOM	535	N	ALA	287	34.905	12.056	19.410	1.00	12.57	PROT
ATOM	536	CA	ALA	287	34.443	13.426	19.622	1.00	12.49	PROT
ATOM	537	CB	ALA	287	35.250	14.386	18.759	1.00	23.54	PROT
ATOM	538	C	ALA	287	32.954	13.559	19.307	1.00	9.21	PROT
ATOM	539	O	ALA	287	32.209	14.205	20.043	1.00	11.68	PROT
ATOM	540	N	LYS	288	32.540	12.929	18.209	1.00	16.43	PROT
ATOM	541	CA	LYS	288	31.157	12.944	17.736	1.00	16.10	PROT
ATOM	542	CB	LYS	288	31.003	11.977	16.569	1.00	13.15	PROT
ATOM	543	CG	LYS	288	31.117	12.636	15.219	1.00	25.55	PROT
ATOM	544	CD	LYS	288	30.480	11.779	14.136	1.00	32.95	PROT
ATOM	545	CE	LYS	288	31.279	10.507	13.900	1.00	34.58	PROT
ATOM	546	NZ	LYS	288	30.755	9.721	12.748	1.00	36.93	PROT
ATOM	547	C	LYS	288	30.154	12.569	18.813	1.00	18.87	PROT
ATOM	548	O	LYS	288	29.078	13.171	18.917	1.00	12.83	PROT
ATOM	549	N	LYS	289	30.525	11.574	19.614	1.00	11.81	PROT
ATOM	550	CA	LYS	289	29.674	11.067	20.681	1.00	15.53	PROT
ATOM	551	CB	LYS	289	30.070	9.631	21.011	1.00	15.88	PROT
ATOM	552	CG	LYS	289	29.767	8.645	19.911	1.00	20.93	PROT
ATOM	553	CD	LYS	289	29.140	7.382	20.471	1.00	28.97	PROT
ATOM	554	CE	LYS	289	29.951	6.167	20.071	1.00	25.06	PROT
ATOM	555	NZ	LYS	289	30.043	6.060	18.590	1.00	39.19	PROT
ATOM	556	C	LYS	289	29.660	11.884	21.969	1.00	15.95	PROT
ATOM	557	O	LYS	289	29.205	11.398	23.001	1.00	28.53	PROT
ATOM	558	N	LEU	290	30.151	13.116	21.919	1.00	10.13	PROT
ATOM	559	CA	LEU	290	30.155	13.959	23.104	1.00	7.83	PROT
ATOM	560	CB	LEU	290	31.588	14.300	23.532	1.00	14.46	PROT
ATOM	561	CG	LEU	290	32.676	13.228	23.542	1.00	11.22	PROT

ATOM	562	CD1	LEU	290	34.016	13.900	23.678	1.00	3.02	PROT
ATOM	563	CD2	LEU	290	32.449	12.257	24.686	1.00	9.39	PROT
ATOM	564	C	LEU	290	29.410	15.259	22.849	1.00	7.59	PROT
ATOM	565	O	LEU	290	29.942	16.148	22.196	1.00	11.01	PROT
ATOM	566	N	PRO	291	28.169	15.381	23.365	1.00	14.33	PROT
ATOM	567	CD	PRO	291	27.515	14.291	24.109	1.00	18.52	PROT
ATOM	568	CA	PRO	291	27.290	16.556	23.240	1.00	6.61	PROT
ATOM	569	CB	PRO	291	26.296	16.400	24.384	1.00	11.95	PROT
ATOM	570	CG	PRO	291	26.496	15.004	24.929	1.00	20.22	PROT
ATOM	571	C	PRO	291	28.029	17.885	23.332	1.00	14.74	PROT
ATOM	572	O	PRO	291	27.795	18.792	22.537	1.00	26.09	PROT
ATOM	573	N	MET	292	28.917	18.002	24.315	1.00	24.06	PROT
ATOM	574	CA	MET	292	29.697	19.225	24.494	1.00	25.33	PROT
ATOM	575	CB	MET	292	30.706	19.046	25.628	1.00	26.65	PROT
ATOM	576	CG	MET	292	30.222	19.581	26.962	1.00	26.97	PROT
ATOM	577	SD	MET	292	31.153	18.943	28.362	1.00	29.01	PROT
ATOM	578	CE	MET	292	30.315	17.438	28.685	1.00	17.91	PROT
ATOM	579	C	MET	292	30.430	19.588	23.204	1.00	23.01	PROT
ATOM	580	O	MET	292	30.478	20.747	22.813	1.00	31.98	PROT
ATOM	581	N	PHE	293	31.007	18.591	22.547	1.00	23.44	PROT
ATOM	582	CA	PHE	293	31.724	18.819	21.297	1.00	24.83	PROT
ATOM	583	CB	PHE	293	32.389	17.529	20.830	1.00	15.05	PROT
ATOM	584	CG	PHE	293	33.214	17.686	19.594	1.00	13.55	PROT
ATOM	585	CD1	PHE	293	34.376	18.446	19.614	1.00	19.86	PROT
ATOM	586	CD2	PHE	293	32.867	17.024	18.425	1.00	22.99	PROT
ATOM	587	CE1	PHE	293	35.184	18.540	18.495	1.00	18.15	PROT
ATOM	588	CE2	PHE	293	33.671	17.108	17.291	1.00	20.83	PROT
ATOM	589	CZ	PHE	293	34.831	17.866	17.328	1.00	22.53	PROT
ATOM	590	C	PHE	293	30.759	19.291	20.222	1.00	27.26	PROT
ATOM	591	O	PHE	293	30.971	20.319	19.577	1.00	28.69	PROT
ATOM	592	N	CYS	294	29.689	18.528	20.040	1.00	29.92	PROT
ATOM	593	CA	CYS	294	28.700	18.855	19.037	1.00	35.54	PROT
ATOM	594	CB	CYS	294	27.540	17.860	19.106	1.00	19.11	PROT
ATOM	595	SG	CYS	294	27.843	16.358	18.132	1.00	35.66	PROT
ATOM	596	C	CYS	294	28.203	20.291	19.171	1.00	38.84	PROT
ATOM	597	O	CYS	294	28.072	20.995	18.169	1.00	45.94	PROT
ATOM	598	N	GLU	295	27.959	20.739	20.401	1.00	27.34	PROT
ATOM	599	CA	GLU	295	27.472	22.097	20.632	1.00	21.06	PROT
ATOM	600	CB	GLU	295	27.178	22.306	22.121	1.00	29.78	PROT
ATOM	601	C	GLU	295	28.458	23.158	20.128	1.00	23.67	PROT
ATOM	602	O	GLU	295	28.228	24.357	20.272	1.00	29.89	PROT
ATOM	603	N	LEU	296	29.551	22.715	19.522	1.00	21.46	PROT
ATOM	604	CA	LEU	296	30.545	23.642	19.005	1.00	26.35	PROT
ATOM	605	CB	LEU	296	31.947	23.128	19.330	1.00	25.17	PROT
ATOM	606	CG	LEU	296	32.419	23.157	20.778	1.00	13.78	PROT
ATOM	607	CD1	LEU	296	33.593	22.217	20.931	1.00	23.61	PROT

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ATOM    608  CD2 LEU   296     32.814  24.564  21.160  1.00 13.82      PROT
ATOM    609  C   LEU   296     30.415  23.783  17.493  1.00 31.88      PROT
ATOM    610  O   LEU   296     29.890  22.890  16.827  1.00 45.99      PROT
ATOM    611  N   PRO   297     30.884  24.912  16.932  1.00 27.00      PROT
ATOM    612  CD  PRO   297     31.423  26.037  17.708  1.00 36.12      PROT
ATOM    613  CA  PRO   297     30.856  25.222  15.492  1.00 22.30      PROT
ATOM    614  CB  PRO   297     31.182  26.716  15.424  1.00 16.06      PROT
ATOM    615  CG  PRO   297     31.107  27.208  16.827  1.00 42.41      PROT
ATOM    616  C   PRO   297     31.838  24.413  14.642  1.00 28.19      PROT
ATOM    617  O   PRO   297     32.983  24.189  15.036  1.00 39.38      PROT
ATOM    618  N   CYS   298     31.371  24.014  13.457  1.00 35.37      PROT
ATOM    619  CA  CYS   298     32.134  23.233  12.481  1.00 32.41      PROT
ATOM    620  CB  CYS   298     31.416  23.289  11.112  1.00 40.85      PROT
ATOM    621  SG  CYS   298     32.431  23.615   9.614  1.00 61.24      PROT
ATOM    622  C   CYS   298     33.596  23.654  12.352  1.00 31.68      PROT
ATOM    623  O   CYS   298     34.474  22.804  12.225  1.00 28.49      PROT
ATOM    624  N   GLU   299     33.869  24.954  12.393  1.00 29.93      PROT
ATOM    625  CA  GLU   299     35.253  25.407  12.278  1.00 36.38      PROT
ATOM    626  CB  GLU   299     35.346  26.931  12.203  1.00 32.78      PROT
ATOM    627  CG  GLU   299     34.467  27.546  11.167  1.00 43.40      PROT
ATOM    628  CD  GLU   299     33.038  27.593  11.625  1.00 58.19      PROT
ATOM    629  OE1 GLU   299     32.723  28.457  12.474  1.00 67.37      PROT
ATOM    630  OE2 GLU   299     32.237  26.762  11.143  1.00 54.02      PROT
ATOM    631  C   GLU   299     36.057  24.932  13.475  1.00 38.89      PROT
ATOM    632  O   GLU   299     37.129  24.342  13.316  1.00 48.67      PROT
ATOM    633  N   ASP   300     35.528  25.186  14.671  1.00 36.49      PROT
ATOM    634  CA  ASP   300     36.201  24.805  15.906  1.00 29.96      PROT
ATOM    635  CB  ASP   300     35.455  25.391  17.111  1.00  5.33      PROT
ATOM    636  CG  ASP   300     35.830  26.853  17.378  1.00 19.10      PROT
ATOM    637  OD1 ASP   300     36.491  27.473  16.518  1.00 27.28      PROT
ATOM    638  OD2 ASP   300     35.470  27.396  18.444  1.00 23.55      PROT
ATOM    639  C   ASP   300     36.380  23.294  16.054  1.00 25.88      PROT
ATOM    640  O   ASP   300     37.441  22.845  16.484  1.00 19.03      PROT
ATOM    641  N   GLN   301     35.360  22.516  15.689  1.00  6.29      PROT
ATOM    642  CA  GLN   301     35.432  21.055  15.769  1.00  9.51      PROT
ATOM    643  CB  GLN   301     34.170  20.421  15.183  1.00 18.27      PROT
ATOM    644  CG  GLN   301     32.886  20.813  15.875  1.00 28.72      PROT
ATOM    645  CD  GLN   301     31.676  20.155  15.243  1.00 17.63      PROT
ATOM    646  OE1 GLN   301     31.689  19.823  14.060  1.00 30.65      PROT
ATOM    647  NE2 GLN   301     30.625  19.965  16.027  1.00 30.44      PROT
ATOM    648  C   GLN   301     36.646  20.491  15.020  1.00 15.48      PROT
ATOM    649  O   GLN   301     37.333  19.584  15.500  1.00 21.96      PROT
ATOM    650  N   ILE   302     36.891  21.014  13.825  1.00 24.00      PROT
ATOM    651  CA  ILE   302     38.011  20.555  13.026  1.00 28.84      PROT
ATOM    652  CB  ILE   302     37.930  21.112  11.607  1.00 33.13      PROT
ATOM    653  CG2 ILE   302     39.147  20.690  10.813  1.00 37.90      PROT
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ATOM   654  CG1 ILE  302   36.656  20.610  10.941  1.00  29.63   PROT
ATOM   655  CD1 ILE  302   36.296  21.356   9.698  1.00  32.99   PROT
ATOM   656  C   ILE  302   39.308  21.014  13.670  1.00  28.73   PROT
ATOM   657  O   ILE  302   40.219  20.219  13.895  1.00  36.02   PROT
ATOM   658  N   ILE  303   39.396  22.304  13.968  1.00  25.04   PROT
ATOM   659  CA  ILE  303   40.590  22.817  14.603  1.00  24.27   PROT
ATOM   660  CB  ILE  303   40.414  24.270  15.054  1.00  20.89   PROT
ATOM   661  CG2 ILE  303   41.686  24.740  15.744  1.00  32.38   PROT
ATOM   662  CG1 ILE  303   40.079  25.158  13.849  1.00  18.88   PROT
ATOM   663  CD1 ILE  303   40.298  26.648  14.079  1.00   5.31   PROT
ATOM   664  C   ILE  303   40.861  21.948  15.825  1.00  26.92   PROT
ATOM   665  O   ILE  303   41.963  21.440  15.997  1.00  31.32   PROT
ATOM   666  N   LEU  304   39.843  21.763  16.659  1.00  11.00   PROT
ATOM   667  CA  LEU  304   39.983  20.953  17.854  1.00   7.21   PROT
ATOM   668  CB  LEU  304   38.663  20.886  18.613  1.00   2.00   PROT
ATOM   669  CG  LEU  304   38.633  21.511  20.012  1.00   8.04   PROT
ATOM   670  CD1 LEU  304   39.383  22.812  19.997  1.00   2.00   PROT
ATOM   671  CD2 LEU  304   37.188  21.729  20.472  1.00   4.99   PROT
ATOM   672  C   LEU  304   40.441  19.554  17.507  1.00   4.64   PROT
ATOM   673  O   LEU  304   41.368  19.032  18.119  1.00  14.88   PROT
ATOM   674  N   LEU  305   39.807  18.953  16.510  1.00   4.55   PROT
ATOM   675  CA  LEU  305   40.140  17.590  16.093  1.00   7.03   PROT
ATOM   676  CB  LEU  305   39.099  17.098  15.104  1.00   3.70   PROT
ATOM   677  CG  LEU  305   38.164  16.054  15.691  1.00  10.31   PROT
ATOM   678  CD1 LEU  305   36.744  16.340  15.245  1.00   2.00   PROT
ATOM   679  CD2 LEU  305   38.629  14.665  15.260  1.00   9.42   PROT
ATOM   680  C   LEU  305   41.527  17.418  15.483  1.00  10.17   PROT
ATOM   681  O   LEU  305   42.174  16.374  15.651  1.00   7.58   PROT
ATOM   682  N   LYS  306   41.975  18.442  14.765  1.00   9.98   PROT
ATOM   683  CA  LYS  306   43.283  18.408  14.127  1.00   9.14   PROT
ATOM   684  CB  LYS  306   43.409  19.558  13.131  1.00  18.85   PROT
ATOM   685  CG  LYS  306   42.815  19.270  11.763  1.00  25.44   PROT
ATOM   686  CD  LYS  306   42.198  20.529  11.178  1.00  29.07   PROT
ATOM   687  CE  LYS  306   42.698  20.808   9.774  1.00  37.81   PROT
ATOM   688  NZ  LYS  306   43.867  19.964   9.403  1.00  30.48   PROT
ATOM   689  C   LYS  306   44.376  18.522  15.175  1.00   7.31   PROT
ATOM   690  O   LYS  306   45.439  17.919  15.048  1.00  16.95   PROT
ATOM   691  N   GLY  307   44.097  19.295  16.218  1.00  12.67   PROT
ATOM   692  CA  GLY  307   45.062  19.484  17.279  1.00   7.25   PROT
ATOM   693  C   GLY  307   45.297  18.269  18.150  1.00  15.08   PROT
ATOM   694  O   GLY  307   46.441  17.972  18.488  1.00  20.11   PROT
ATOM   695  N   CYS  308   44.225  17.552  18.481  1.00   8.29   PROT
ATOM   696  CA  CYS  308   44.286  16.380  19.364  1.00   3.44   PROT
ATOM   697  CB  CYS  308   43.097  16.402  20.326  1.00  14.26   PROT
ATOM   698  SG  CYS  308   41.539  15.750  19.634  1.00  21.83   PROT
ATOM   699  C   CYS  308   44.344  14.995  18.738  1.00   8.37   PROT
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ATOM	700	O	CYS	308	44.502	13.997	19.453	1.00 10.98	PROT
ATOM	701	N	CYS	309	44.202	14.916	17.420	1.00 10.83	PROT
ATOM	702	CA	CYS	309	44.236	13.625	16.752	1.00 3.22	PROT
ATOM	703	CB	CYS	309	44.240	13.831	15.240	1.00 15.79	PROT
ATOM	704	SG	CYS	309	43.683	12.402	14.319	1.00 25.54	PROT
ATOM	705	C-	CYS	309	45.439	12.767	17.193	1.00 2.00	PROT
ATOM	706	O	CYS	309	45.251	11.722	17.807	1.00 12.28	PROT
ATOM	707	N	MET	310	46.663	13.205	16.900	1.00 2.00	PROT
ATOM	708	CA	MET	310	47.858	12.446	17.286	1.00 2.00	PROT
ATOM	709	CB	MET	310	49.122	13.171	16.860	1.00 2.00	PROT
ATOM	710	CG	MET	310	49.975	12.422	15.880	1.00 5.92	PROT
ATOM	711	SD	MET	310	50.481	10.805	16.368	1.00 22.47	PROT
ATOM	712	CE	MET	310	52.140	11.112	16.808	1.00 20.84	PROT
ATOM	713	C	MET	310	47.941	12.239	18.793	1.00 11.95	PROT
ATOM	714	O	MET	310	48.455	11.220	19.270	1.00 15.53	PROT
ATOM	715	N	GLU	311	47.463	13.225	19.542	1.00 6.79	PROT
ATOM	716	CA	GLU	311	47.493	13.139	20.979	1.00 2.00	PROT
ATOM	717	CB	GLU	311	46.932	14.427	21.581	1.00 6.42	PROT
ATOM	718	CG	GLU	311	47.880	15.619	21.436	1.00 8.40	PROT
ATOM	719	CD	GLU	311	47.236	16.940	21.820	1.00 14.10	PROT
ATOM	720	OE1	GLU	311	46.157	16.895	22.434	1.00 16.54	PROT
ATOM	721	OE2	GLU	311	47.795	18.020	21.515	1.00 4.09	PROT
ATOM	722	C	GLU	311	46.683	11.923	21.406	1.00 7.80	PROT
ATOM	723	O	GLU	311	47.195	11.026	22.067	1.00 14.07	PROT
ATOM	724	N	ILE	312	45.425	11.873	21.001	1.00 2.00	PROT
ATOM	725	CA	ILE	312	44.574	10.752	21.371	1.00 3.60	PROT
ATOM	726	CB	ILE	312	43.114	11.013	20.947	1.00 2.00	PROT
ATOM	727	CG2	ILE	312	42.277	9.769	21.145	1.00 2.00	PROT
ATOM	728	CG1	ILE	312	42.579	12.221	21.727	1.00 2.00	PROT
ATOM	729	CD1	ILE	312	41.118	12.555	21.495	1.00 2.00	PROT
ATOM	730	C	ILE	312	45.049	9.437	20.760	1.00 8.32	PROT
ATOM	731	O	ILE	312	44.918	8.373	21.370	1.00 5.58	PROT
ATOM	732	N	MET	313	45.615	9.501	19.563	1.00 3.98	PROT
ATOM	733	CA	MET	313	46.054	8.282	18.905	1.00 8.91	PROT
ATOM	734	CB	MET	313	46.455	8.572	17.462	1.00 25.71	PROT
ATOM	735	CG	MET	313	45.430	8.111	16.431	1.00 22.86	PROT
ATOM	736	SD	MET	313	45.955	8.430	14.736	1.00 20.60	PROT
ATOM	737	CE	MET	313	45.412	10.055	14.534	1.00 14.95	PROT
ATOM	738	C	MET	313	47.211	7.634	19.635	1.00 12.95	PROT
ATOM	739	O	MET	313	47.213	6.426	19.857	1.00 22.09	PROT
ATOM	740	N	SER	314	48.190	8.442	20.021	1.00 10.79	PROT
ATOM	741	CA	SER	314	49.354	7.935	20.719	1.00 2.00	PROT
ATOM	742	CB	SER	314	50.399	9.042	20.816	1.00 7.24	PROT
ATOM	743	OG	SER	314	50.453	9.815	19.619	1.00 10.89	PROT
ATOM	744	C	SER	314	48.991	7.399	22.105	1.00 8.64	PROT
ATOM	745	O	SER	314	49.559	6.392	22.558	1.00 5.72	PROT

ATOM	746	N	LEU	315	48.050	8.062	22.782	1.00	2.00	PROT
ATOM	747	CA	LEU	315	47.628	7.605	24.104	1.00	2.00	PROT
ATOM	748	CB	LEU	315	46.521	8.502	24.671	1.00	2.95	PROT
ATOM	749	CG	LEU	315	45.831	8.096	25.992	1.00	2.00	PROT
ATOM	750	CD1	LEU	315	46.876	7.845	27.072	1.00	2.54	PROT
ATOM	751	CD2	LEU	315	44.865	9.182	26.444	1.00	2.00	PROT
ATOM	752	C	LEU	315	47.107	6.182	23.945	1.00	3.25	PROT
ATOM	753	O	LEU	315	47.568	5.253	24.603	1.00	2.00	PROT
ATOM	754	N	ARG	316	46.157	6.010	23.039	1.00	7.28	PROT
ATOM	755	CA	ARG	316	45.588	4.691	22.808	1.00	13.31	PROT
ATOM	756	CB	ARG	316	44.551	4.758	21.693	1.00	11.11	PROT
ATOM	757	CG	ARG	316	43.545	5.872	21.887	1.00	10.55	PROT
ATOM	758	CD	ARG	316	42.354	5.639	21.012	1.00	10.09	PROT
ATOM	759	NE	ARG	316	41.131	6.149	21.605	1.00	12.29	PROT
ATOM	760	CZ	ARG	316	39.955	6.127	20.994	1.00	6.99	PROT
ATOM	761	NH1	ARG	316	38.880	6.608	21.595	1.00	19.32	PROT
ATOM	762	NH2	ARG	316	39.853	5.619	19.778	1.00	17.16	PROT
ATOM	763	C	ARG	316	46.666	3.686	22.458	1.00	10.10	PROT
ATOM	764	O	ARG	316	46.549	2.508	22.753	1.00	14.94	PROT
ATOM	765	N	ALA	317	47.723	4.148	21.819	1.00	6.51	PROT
ATOM	766	CA	ALA	317	48.801	3.243	21.474	1.00	11.04	PROT
ATOM	767	CB	ALA	317	49.749	3.902	20.487	1.00	16.13	PROT
ATOM	768	C	ALA	317	49.539	2.910	22.753	1.00	12.70	PROT
ATOM	769	O	ALA	317	49.822	1.755	23.033	1.00	23.09	PROT
ATOM	770	N	ALA	318	49.832	3.943	23.534	1.00	14.79	PROT
ATOM	771	CA	ALA	318	50.567	3.779	24.776	1.00	8.38	PROT
ATOM	772	CB	ALA	318	50.727	5.122	25.448	1.00	11.75	PROT
ATOM	773	C	ALA	318	49.941	2.786	25.741	1.00	10.30	PROT
ATOM	774	O	ALA	318	50.585	1.824	26.165	1.00	8.48	PROT
ATOM	775	N	VAL	319	48.680	3.011	26.083	1.00	7.87	PROT
ATOM	776	CA	VAL	319	48.002	2.131	27.027	1.00	9.64	PROT
ATOM	777	CB	VAL	319	46.579	2.622	27.334	1.00	2.57	PROT
ATOM	778	CG1	VAL	319	46.644	3.929	28.127	1.00	5.09	PROT
ATOM	779	CG2	VAL	319	45.807	2.823	26.043	1.00	5.15	PROT
ATOM	780	C	VAL	319	47.930	0.695	26.541	1.00	11.68	PROT
ATOM	781	O	VAL	319	47.440	-0.171	27.254	1.00	16.32	PROT
ATOM	782	N	ARG	320	48.415	0.444	25.329	1.00	16.40	PROT
ATOM	783	CA	ARG	320	48.405	-0.902	24.767	1.00	13.20	PROT
ATOM	784	CB	ARG	320	47.736	-0.918	23.393	1.00	2.00	PROT
ATOM	785	CG	ARG	320	46.310	-0.405	23.420	1.00	14.07	PROT
ATOM	786	CD	ARG	320	45.283	-1.460	23.035	1.00	19.69	PROT
ATOM	787	NE	ARG	320	44.168	-0.868	22.292	1.00	36.52	PROT
ATOM	788	CZ	ARG	320	42.912	-1.313	22.322	1.00	47.43	PROT
ATOM	789	NH1	ARG	320	41.966	-0.705	21.609	1.00	43.57	PROT
ATOM	790	NH2	ARG	320	42.596	-2.367	23.061	1.00	49.93	PROT
ATOM	791	C	ARG	320	49.835	-1.391	24.662	1.00	15.45	PROT

ATOM	792	O	ARG	320	50.167	-2.218	23.809	1.00	24.78	PROT
ATOM	793	N	TYR	321	50.684	-0.860	25.537	1.00	13.68	PROT
ATOM	794	CA	TYR	321	52.085	-1.258	25.572	1.00	18.80	PROT
ATOM	795	CB	TYR	321	52.925	-0.208	26.295	1.00	9.64	PROT
ATOM	796	CG	TYR	321	54.313	-0.685	26.622	1.00	11.20	PROT
ATOM	797	CD1	TYR	321	55.211	-1.005	25.612	1.00	2.00	PROT
ATOM	798	CE1	TYR	321	56.483	-1.461	25.906	1.00	9.63	PROT
ATOM	799	CD2	TYR	321	54.727	-0.834	27.943	1.00	18.93	PROT
ATOM	800	CE2	TYR	321	56.003	-1.293	28.250	1.00	19.49	PROT
ATOM	801	CZ	TYR	321	56.874	-1.604	27.225	1.00	14.75	PROT
ATOM	802	OH	TYR	321	58.137	-2.053	27.518	1.00	22.96	PROT
ATOM	803	C	TYR	321	52.209	-2.607	26.287	1.00	19.74	PROT
ATOM	804	O	TYR	321	51.483	-2.889	27.242	1.00	31.56	PROT
ATOM	805	N	ASP	322	53.136	-3.435	25.823	1.00	26.35	PROT
ATOM	806	CA	ASP	322	53.346	-4.759	26.392	1.00	22.38	PROT
ATOM	807	CB	ASP	322	52.982	-5.814	25.353	1.00	33.63	PROT
ATOM	808	CG	ASP	322	52.601	-7.128	25.970	1.00	40.70	PROT
ATOM	809	OD1	ASP	322	51.539	-7.658	25.591	1.00	48.18	PROT
ATOM	810	OD2	ASP	322	53.358	-7.628	26.826	1.00	38.91	PROT
ATOM	811	C	ASP	322	54.800	-4.928	26.776	1.00	23.51	PROT
ATOM	812	O	ASP	322	55.683	-4.844	25.924	1.00	37.80	PROT
ATOM	813	N	PRO	323	55.076	-5.160	28.066	1.00	24.06	PROT
ATOM	814	CD	PRO	323	54.130	-5.258	29.187	1.00	19.35	PROT
ATOM	815	CA	PRO	323	56.462	-5.339	28.507	1.00	23.60	PROT
ATOM	816	CB	PRO	323	56.390	-5.121	30.007	1.00	3.90	PROT
ATOM	817	CG	PRO	323	55.031	-5.570	30.360	1.00	14.06	PROT
ATOM	818	C	PRO	323	56.949	-6.736	28.151	1.00	21.79	PROT
ATOM	819	O	PRO	323	58.149	-7.003	28.119	1.00	27.28	PROT
ATOM	820	N	GLU	324	56.009	-7.633	27.889	1.00	37.63	PROT
ATOM	821	CA	GLU	324	56.366	-8.993	27.524	1.00	42.63	PROT
ATOM	822	CB	GLU	324	55.133	-9.885	27.551	1.00	37.58	PROT
ATOM	823	C	GLU	324	56.971	-8.956	26.124	1.00	43.28	PROT
ATOM	824	O	GLU	324	58.154	-9.239	25.938	1.00	43.14	PROT
ATOM	825	N	SER	325	56.153	-8.586	25.142	1.00	31.72	PROT
ATOM	826	CA	SER	325	56.607	-8.508	23.765	1.00	30.34	PROT
ATOM	827	CB	SER	325	55.413	-8.522	22.814	1.00	17.63	PROT
ATOM	828	OG	SER	325	54.356	-7.729	23.315	1.00	31.90	PROT
ATOM	829	C	SER	325	57.441	-7.257	23.519	1.00	31.94	PROT
ATOM	830	O	SER	325	58.146	-7.169	22.513	1.00	45.47	PROT
ATOM	831	N	GLU	326	57.359	-6.289	24.429	1.00	31.10	PROT
ATOM	832	CA	GLU	326	58.119	-5.050	24.281	1.00	31.43	PROT
ATOM	833	CB	GLU	326	59.598	-5.382	24.091	1.00	30.39	PROT
ATOM	834	CG	GLU	326	60.552	-4.342	24.612	1.00	35.00	PROT
ATOM	835	CD	GLU	326	61.738	-4.965	25.304	1.00	29.12	PROT
ATOM	836	OE1	GLU	326	61.525	-5.579	26.370	1.00	39.21	PROT
ATOM	837	OE2	GLU	326	62.872	-4.844	24.788	1.00	29.11	PROT

ATOM	838	C	GLU	326	57.605	-4.283	23.063	1.00	28.37	PROT
ATOM	839	O	GLU	326	58.382	-3.677	22.321	1.00	26.51	PROT
ATOM	840	N	THR	327	56.290	-4.301	22.873	1.00	23.71	PROT
ATOM	841	CA	THR	327	55.674	-3.648	21.720	1.00	22.11	PROT
ATOM	842	CB	THR	327	55.298	-4.705	20.652	1.00	28.08	PROT
ATOM	843	OG1	THR	327	54.226	-5.524	21.145	1.00	16.87	PROT
ATOM	844	CG2	THR	327	56.494	-5.597	20.340	1.00	24.03	PROT
ATOM	845	C	THR	327	54.420	-2.824	22.046	1.00	22.42	PROT
ATOM	846	O	THR	327	53.928	-2.830	23.172	1.00	17.50	PROT
ATOM	847	N	LEU	328	53.914	-2.122	21.038	1.00	17.28	PROT
ATOM	848	CA	LEU	328	52.728	-1.285	21.171	1.00	14.83	PROT
ATOM	849	CB	LEU	328	53.065	0.157	20.806	1.00	15.27	PROT
ATOM	850	CG	LEU	328	53.693	1.036	21.879	1.00	10.50	PROT
ATOM	851	CD1	LEU	328	54.137	2.336	21.254	1.00	16.75	PROT
ATOM	852	CD2	LEU	328	52.682	1.285	22.979	1.00	20.19	PROT
ATOM	853	C	LEU	328	51.687	-1.804	20.198	1.00	18.16	PROT
ATOM	854	O	LEU	328	52.035	-2.508	19.254	1.00	23.88	PROT
ATOM	855	N	THR	329	50.421	-1.450	20.402	1.00	9.40	PROT
ATOM	856	CA	THR	329	49.389	-1.920	19.495	1.00	8.26	PROT
ATOM	857	CB	THR	329	48.460	-2.888	20.199	1.00	8.67	PROT
ATOM	858	OG1	THR	329	49.213	-4.052	20.577	1.00	13.23	PROT
ATOM	859	CG2	THR	329	47.308	-3.289	19.270	1.00	2.00	PROT
ATOM	860	C	THR	329	48.569	-0.841	18.800	1.00	16.65	PROT
ATOM	861	O	THR	329	47.726	-0.158	19.406	1.00	17.20	PROT
ATOM	862	N	LEU	330	48.808	-0.725	17.495	1.00	21.56	PROT
ATOM	863	CA	LEU	330	48.138	0.258	16.655	1.00	20.95	PROT
ATOM	864	CB	LEU	330	49.106	0.676	15.539	1.00	17.36	PROT
ATOM	865	CG	LEU	330	50.570	0.797	16.028	1.00	12.86	PROT
ATOM	866	CD1	LEU	330	51.531	0.521	14.898	1.00	10.10	PROT
ATOM	867	CD2	LEU	330	50.830	2.180	16.600	1.00	2.00	PROT
ATOM	868	C	LEU	330	46.803	-0.258	16.097	1.00	21.35	PROT
ATOM	869	O	LEU	330	46.655	-1.444	15.791	1.00	21.93	PROT
ATOM	870	N	ASN	331	45.834	0.648	15.987	1.00	27.76	PROT
ATOM	871	CA	ASN	331	44.487	0.338	15.498	1.00	28.09	PROT
ATOM	872	CB	ASN	331	44.460	0.275	13.971	1.00	24.95	PROT
ATOM	873	CG	ASN	331	43.074	0.540	13.397	1.00	33.45	PROT
ATOM	874	OD1	ASN	331	42.512	-0.305	12.701	1.00	38.21	PROT
ATOM	875	ND2	ASN	331	42.522	1.715	13.680	1.00	24.73	PROT
ATOM	876	C	ASN	331	43.946	-0.967	16.075	1.00	32.03	PROT
ATOM	877	O	ASN	331	43.166	-1.668	15.431	1.00	35.49	PROT
ATOM	878	N	GLY	332	44.357	-1.282	17.299	1.00	40.24	PROT
ATOM	879	CA	GLY	332	43.894	-2.495	17.941	1.00	38.04	PROT
ATOM	880	C	GLY	332	44.009	-3.665	16.998	1.00	40.09	PROT
ATOM	881	O	GLY	332	43.001	-4.225	16.563	1.00	45.79	PROT
ATOM	882	N	GLU	333	45.249	-4.013	16.664	1.00	41.60	PROT
ATOM	883	CA	GLU	333	45.539	-5.126	15.763	1.00	36.28	PROT

ATOM	884	CB	GLU	333	44.752	-4.978	14.454	1.00 46.39	PROT
ATOM	885	CG	GLU	333	44.745	-3.580	13.862	1.00 58.03	PROT
ATOM	886	CD	GLU	333	43.883	-3.485	12.610	1.00 67.00	PROT
ATOM	887	OE1	GLU	333	44.446	-3.282	11.511	1.00 67.51	PROT
ATOM	888	OE2	GLU	333	42.644	-3.615	12.727	1.00 71.01	PROT
ATOM	889	C	GLU	333	47.027	-5.266	15.446	1.00 33.13	PROT
ATOM	890	O	GLU	333	47.563	-6.366	15.486	1.00 27.97	PROT
ATOM	891	N	MET	334	47.692	-4.152	15.143	1.00 27.00	PROT
ATOM	892	CA	MET	334	49.111	-4.188	14.798	1.00 29.83	PROT
ATOM	893	CB	MET	334	49.416	-3.159	13.699	1.00 26.04	PROT
ATOM	894	CG	MET	334	50.561	-3.588	12.765	1.00 28.06	PROT
ATOM	895	SD	MET	334	51.263	-2.273	11.736	1.00 28.46	PROT
ATOM	896	CE	MET	334	50.021	-2.123	10.497	1.00 22.48	PROT
ATOM	897	C	MET	334	50.087	-3.995	15.959	1.00 33.52	PROT
ATOM	898	O	MET	334	50.071	-2.962	16.631	1.00 35.81	PROT
ATOM	899	N	ALA	335	50.942	-4.996	16.171	1.00 27.46	PROT
ATOM	900	CA	ALA	335	51.948	-4.976	17.234	1.00 29.69	PROT
ATOM	901	CB	ALA	335	51.966	-6.314	17.965	1.00 12.67	PROT
ATOM	902	C	ALA	335	53.336	-4.682	16.662	1.00 31.74	PROT
ATOM	903	O	ALA	335	53.943	-5.530	16.009	1.00 43.66	PROT
ATOM	904	N	VAL	336	53.848	-3.489	16.923	1.00 23.98	PROT
ATOM	905	CA	VAL	336	55.151	-3.118	16.405	1.00 21.32	PROT
ATOM	906	CB	VAL	336	55.028	-1.873	15.504	1.00 17.37	PROT
ATOM	907	CG1	VAL	336	53.945	-2.104	14.462	1.00 14.88	PROT
ATOM	908	CG2	VAL	336	54.686	-0.648	16.339	1.00 15.53	PROT
ATOM	909	C	VAL	336	56.150	-2.852	17.526	1.00 22.72	PROT
ATOM	910	O	VAL	336	55.763	-2.540	18.651	1.00 25.15	PROT
ATOM	911	N	THR	337	57.435	-3.001	17.220	1.00 19.21	PROT
ATOM	912	CA	THR	337	58.476	-2.765	18.205	1.00 20.31	PROT
ATOM	913	CB	THR	337	59.752	-3.578	17.884	1.00 14.76	PROT
ATOM	914	OG1	THR	337	59.957	-3.616	16.467	1.00 16.43	PROT
ATOM	915	CG2	THR	337	59.615	-4.995	18.393	1.00 7.08	PROT
ATOM	916	C	THR	337	58.785	-1.272	18.157	1.00 24.20	PROT
ATOM	917	O	THR	337	58.322	-0.591	17.245	1.00 28.05	PROT
ATOM	918	N	ARG	338	59.548	-0.766	19.134	1.00 27.55	PROT
ATOM	919	CA	ARG	338	59.917	0.655	19.197	1.00 16.80	PROT
ATOM	920	CB	ARG	338	60.757	0.942	20.446	1.00 17.04	PROT
ATOM	921	CG	ARG	338	61.687	2.149	20.303	1.00 9.79	PROT
ATOM	922	CD	ARG	338	62.666	2.276	21.458	1.00 2.00	PROT
ATOM	923	NE	ARG	338	61.994	2.128	22.739	1.00 20.70	PROT
ATOM	924	CZ	ARG	338	61.897	3.083	23.657	1.00 12.04	PROT
ATOM	925	NH1	ARG	338	61.261	2.840	24.784	1.00 27.11	PROT
ATOM	926	NH2	ARG	338	62.436	4.272	23.459	1.00 22.23	PROT
ATOM	927	C	ARG	338	60.702	1.085	17.968	1.00 21.26	PROT
ATOM	928	O	ARG	338	60.338	2.049	17.295	1.00 16.40	PROT
ATOM	929	N	GLY	339	61.792	0.374	17.693	1.00 31.57	PROT

ATOM	930	CA	GLY	339	62.609	0.696	16.540	1.00	32.42	PROT
ATOM	931	C	GLY	339	61.816	0.534	15.254	1.00	30.08	PROT
ATOM	932	O	GLY	339	61.932	1.342	14.328	1.00	25.82	PROT
ATOM	933	N	GLN	340	61.008	-0.520	15.192	1.00	16.60	PROT
ATOM	934	CA	GLN	340	60.191	-0.768	14.012	1.00	14.08	PROT
ATOM	935	CB	GLN	340	59.199	-1.884	14.301	1.00	5.73	PROT
ATOM	936	CG	GLN	340	58.849	-2.697	13.100	1.00	16.15	PROT
ATOM	937	CD	GLN	340	58.577	-4.141	13.442	1.00	22.46	PROT
ATOM	938	OE1	GLN	340	57.767	-4.450	14.316	1.00	30.45	PROT
ATOM	939	NE2	GLN	340	59.254	-5.040	12.749	1.00	34.19	PROT
ATOM	940	C	GLN	340	59.452	0.521	13.632	1.00	22.07	PROT
ATOM	941	O	GLN	340	59.707	1.103	12.576	1.00	21.13	PROT
ATOM	942	N	LEU	341	58.561	0.976	14.518	1.00	27.88	PROT
ATOM	943	CA	LEU	341	57.778	2.197	14.306	1.00	21.82	PROT
ATOM	944	CB	LEU	341	56.813	2.418	15.483	1.00	10.20	PROT
ATOM	945	CG	LEU	341	55.930	3.682	15.534	1.00	16.27	PROT
ATOM	946	CD1	LEU	341	54.777	3.618	14.518	1.00	13.27	PROT
ATOM	947	CD2	LEU	341	55.370	3.822	16.935	1.00	10.68	PROT
ATOM	948	C	LEU	341	58.683	3.413	14.138	1.00	13.98	PROT
ATOM	949	O	LEU	341	58.315	4.386	13.486	1.00	7.94	PROT
ATOM	950	N	LYS	342	59.867	3.361	14.734	1.00	11.48	PROT
ATOM	951	CA	LYS	342	60.804	4.465	14.613	1.00	17.77	PROT
ATOM	952	CB	LYS	342	62.063	4.213	15.459	1.00	13.58	PROT
ATOM	953	CG	LYS	342	63.219	5.173	15.140	1.00	13.27	PROT
ATOM	954	CD	LYS	342	64.173	5.358	16.319	1.00	5.44	PROT
ATOM	955	CE	LYS	342	64.500	6.829	16.546	1.00	5.47	PROT
ATOM	956	NZ	LYS	342	65.721	7.019	17.388	1.00	4.98	PROT
ATOM	957	C	LYS	342	61.184	4.579	13.141	1.00	19.97	PROT
ATOM	958	O	LYS	342	60.939	5.595	12.501	1.00	20.34	PROT
ATOM	959	N	ASN	343	61.764	3.510	12.605	1.00	26.88	PROT
ATOM	960	CA	ASN	343	62.196	3.470	11.219	1.00	22.34	PROT
ATOM	961	CB	ASN	343	62.829	2.123	10.929	1.00	4.80	PROT
ATOM	962	CG	ASN	343	64.060	1.894	11.758	1.00	18.77	PROT
ATOM	963	OD1	ASN	343	64.755	2.848	12.117	1.00	14.12	PROT
ATOM	964	ND2	ASN	343	64.340	0.634	12.083	1.00	12.72	PROT
ATOM	965	C	ASN	343	61.091	3.736	10.224	1.00	20.40	PROT
ATOM	966	O	ASN	343	61.309	4.417	9.232	1.00	20.76	PROT
ATOM	967	N	GLY	344	59.908	3.200	10.494	1.00	12.62	PROT
ATOM	968	CA	GLY	344	58.775	3.382	9.603	1.00	6.27	PROT
ATOM	969	C	GLY	344	58.229	4.796	9.451	1.00	14.56	PROT
ATOM	970	O	GLY	344	57.177	4.972	8.826	1.00	13.30	PROT
ATOM	971	N	GLY	345	58.902	5.795	10.030	1.00	16.51	PROT
ATOM	972	CA	GLY	345	58.439	7.166	9.869	1.00	20.04	PROT
ATOM	973	C	GLY	345	58.248	8.112	11.046	1.00	25.64	PROT
ATOM	974	O	GLY	345	58.243	9.331	10.849	1.00	23.32	PROT
ATOM	975	N	LEU	346	58.099	7.588	12.260	1.00	22.22	PROT

ATOM	976	CA	LEU	346	57.874	8.449	13.415	1.00	14.94	PROT
ATOM	977	CB	LEU	346	57.070	7.700	14.474	1.00	3.92	PROT
ATOM	978	CG	LEU	346	55.566	7.538	14.193	1.00	5.92	PROT
ATOM	979	CD1	LEU	346	54.938	6.796	15.355	1.00	2.00	PROT
ATOM	980	CD2	LEU	346	54.884	8.885	13.973	1.00	2.00	PROT
ATOM	981	C	LEU	346	59.126	9.042	14.041	1.00	14.60	PROT
ATOM	982	O	LEU	346	59.102	10.153	14.554	1.00	17.36	PROT
ATOM	983	N	GLY	347	60.226	8.312	14.001	1.00	12.09	PROT
ATOM	984	CA	GLY	347	61.455	8.828	14.581	1.00	15.62	PROT
ATOM	985	C	GLY	347	61.439	8.963	16.090	1.00	6.31	PROT
ATOM	986	O	GLY	347	60.865	8.141	16.790	1.00	13.15	PROT
ATOM	987	N	VAL	348	62.076	10.011	16.592	1.00	13.74	PROT
ATOM	988	CA	VAL	348	62.141	10.259	18.030	1.00	10.13	PROT
ATOM	989	CB	VAL	348	62.757	11.646	18.342	1.00	9.26	PROT
ATOM	990	CG1	VAL	348	61.867	12.752	17.794	1.00	2.00	PROT
ATOM	991	CG2	VAL	348	62.942	11.802	19.836	1.00	2.00	PROT
ATOM	992	C	VAL	348	60.763	10.216	18.650	1.00	6.61	PROT
ATOM	993	O	VAL	348	60.619	10.066	19.862	1.00	3.12	PROT
ATOM	994	N	VAL	349	59.746	10.358	17.816	1.00	5.51	PROT
ATOM	995	CA	VAL	349	58.386	10.342	18.306	1.00	2.00	PROT
ATOM	996	CB	VAL	349	57.421	10.886	17.260	1.00	4.46	PROT
ATOM	997	CG1	VAL	349	56.001	10.578	17.656	1.00	2.00	PROT
ATOM	998	CG2	VAL	349	57.623	12.387	17.122	1.00	2.00	PROT
ATOM	999	C	VAL	349	57.995	8.933	18.687	1.00	9.15	PROT
ATOM	1000	O	VAL	349	57.284	8.726	19.664	1.00	15.02	PROT
ATOM	1001	N	SER	350	58.446	7.943	17.933	1.00	7.42	PROT
ATOM	1002	CA	SER	350	58.087	6.590	18.315	1.00	12.87	PROT
ATOM	1003	CB	SER	350	58.695	5.561	17.382	1.00	9.48	PROT
ATOM	1004	OG	SER	350	58.529	4.269	17.931	1.00	10.82	PROT
ATOM	1005	C	SER	350	58.628	6.364	19.717	1.00	15.55	PROT
ATOM	1006	O	SER	350	57.963	5.761	20.558	1.00	25.88	PROT
ATOM	1007	N	ASP	351	59.838	6.863	19.950	1.00	16.38	PROT
ATOM	1008	CA	ASP	351	60.522	6.743	21.230	1.00	9.58	PROT
ATOM	1009	CB	ASP	351	61.861	7.469	21.176	1.00	7.32	PROT
ATOM	1010	CG	ASP	351	62.989	6.576	20.742	1.00	24.16	PROT
ATOM	1011	OD1	ASP	351	64.011	7.110	20.275	1.00	30.24	PROT
ATOM	1012	OD2	ASP	351	62.866	5.343	20.869	1.00	33.85	PROT
ATOM	1013	C	ASP	351	59.695	7.360	22.334	1.00	17.01	PROT
ATOM	1014	O	ASP	351	59.605	6.822	23.435	1.00	26.28	PROT
ATOM	1015	N	ALA	352	59.100	8.508	22.032	1.00	13.51	PROT
ATOM	1016	CA	ALA	352	58.294	9.224	23.004	1.00	5.19	PROT
ATOM	1017	CB	ALA	352	57.914	10.593	22.452	1.00	2.00	PROT
ATOM	1018	C	ALA	352	57.055	8.432	23.374	1.00	2.00	PROT
ATOM	1019	O	ALA	352	56.701	8.360	24.535	1.00	7.20	PROT
ATOM	1020	N	ILE	353	56.396	7.832	22.393	1.00	2.00	PROT
ATOM	1021	CA	ILE	353	55.201	7.049	22.677	1.00	5.90	PROT

ATOM	1022	CB	ILE	353	54.468	6.626	21.381	1.00	5.87	PROT
ATOM	1023	CG2	ILE	353	53.113	6.049	21.732	1.00	2.00	PROT
ATOM	1024	CG1	ILE	353	54.349	7.831	20.428	1.00	3.91	PROT
ATOM	1025	CD1	ILE	353	53.330	7.664	19.294	1.00	2.00	PROT
ATOM	1026	C	ILE	353	55.554	5.795	23.484	1.00	12.46	PROT
ATOM	1027	O	ILE	353	54.848	5.426	24.428	1.00	11.74	PROT
ATOM	1028	N	PHE	354	56.644	5.131	23.122	1.00	19.57	PROT
ATOM	1029	CA	PHE	354	57.034	3.944	23.862	1.00	14.42	PROT
ATOM	1030	CB	PHE	354	58.256	3.270	23.209	1.00	3.70	PROT
ATOM	1031	CG	PHE	354	57.890	2.141	22.284	1.00	9.42	PROT
ATOM	1032	CD1	PHE	354	57.427	2.401	20.995	1.00	12.33	PROT
ATOM	1033	CD2	PHE	354	57.912	0.822	22.727	1.00	15.63	PROT
ATOM	1034	CE1	PHE	354	56.982	1.366	20.165	1.00	6.67	PROT
ATOM	1035	CE2	PHE	354	57.468	-0.224	21.900	1.00	16.53	PROT
ATOM	1036	CZ	PHE	354	57.002	0.053	20.620	1.00	11.61	PROT
ATOM	1037	C	PHE	354	57.322	4.346	25.307	1.00	18.55	PROT
ATOM	1038	O	PHE	354	56.796	3.740	26.233	1.00	16.67	PROT
ATOM	1039	N	ASP	355	58.125	5.392	25.491	1.00	12.83	PROT
ATOM	1040	CA	ASP	355	58.486	5.881	26.818	1.00	5.31	PROT
ATOM	1041	CB	ASP	355	59.351	7.132	26.697	1.00	9.38	PROT
ATOM	1042	CG	ASP	355	60.805	6.814	26.428	1.00	5.96	PROT
ATOM	1043	OD1	ASP	355	61.112	5.683	26.016	1.00	8.53	PROT
ATOM	1044	OD2	ASP	355	61.650	7.706	26.628	1.00	15.51	PROT
ATOM	1045	C	ASP	355	57.252	6.199	27.659	1.00	10.27	PROT
ATOM	1046	O	ASP	355	57.231	5.972	28.871	1.00	21.86	PROT
ATOM	1047	N	LEU	356	56.224	6.726	27.014	1.00	4.18	PROT
ATOM	1048	CA	LEU	356	54.988	7.061	27.697	1.00	2.07	PROT
ATOM	1049	CB	LEU	356	54.086	7.865	26.771	1.00	2.24	PROT
ATOM	1050	CG	LEU	356	52.694	8.229	27.266	1.00	3.11	PROT
ATOM	1051	CD1	LEU	356	52.771	9.317	28.323	1.00	2.00	PROT
ATOM	1052	CD2	LEU	356	51.877	8.709	26.086	1.00	2.00	PROT
ATOM	1053	C	LEU	356	54.281	5.786	28.091	1.00	9.17	PROT
ATOM	1054	O	LEU	356	53.831	5.644	29.221	1.00	14.77	PROT
ATOM	1055	N	GLY	357	54.183	4.856	27.147	1.00	13.10	PROT
ATOM	1056	CA	GLY	357	53.515	3.597	27.413	1.00	6.91	PROT
ATOM	1057	C	GLY	357	54.113	2.879	28.598	1.00	8.33	PROT
ATOM	1058	O	GLY	357	53.400	2.426	29.492	1.00	9.09	PROT
ATOM	1059	N	MET	358	55.435	2.768	28.607	1.00	12.61	PROT
ATOM	1060	CA	MET	358	56.112	2.091	29.692	1.00	10.53	PROT
ATOM	1061	CB	MET	358	57.626	2.153	29.498	1.00	5.45	PROT
ATOM	1062	CG	MET	358	58.138	1.507	28.210	1.00	15.15	PROT
ATOM	1063	SD	MET	358	59.971	1.352	28.113	1.00	17.63	PROT
ATOM	1064	CE	MET	358	60.445	3.023	27.774	1.00	20.56	PROT
ATOM	1065	C	MET	358	55.714	2.809	30.972	1.00	15.08	PROT
ATOM	1066	O	MET	358	55.241	2.191	31.920	1.00	27.69	PROT
ATOM	1067	N	SER	359	55.875	4.125	30.984	1.00	20.67	PROT

ATOM	1068	CA	SER	359	55.551	4.924	32.158	1.00	19.72	PROT
ATOM	1069	CB	SER	359	55.831	6.398	31.861	1.00	19.98	PROT
ATOM	1070	OG	SER	359	54.753	7.220	32.262	1.00	33.66	PROT
ATOM	1071	C	SER	359	54.115	4.757	32.656	1.00	22.67	PROT
ATOM	1072	O	SER	359	53.849	4.837	33.860	1.00	22.94	PROT
ATOM	1073	N	LEU	360	53.197	4.514	31.727	1.00	20.55	PROT
ATOM	1074	CA	LEU	360	51.785	4.360	32.054	1.00	17.01	PROT
ATOM	1075	CB	LEU	360	50.934	4.578	30.802	1.00	2.60	PROT
ATOM	1076	CG	LEU	360	50.674	5.988	30.291	1.00	6.99	PROT
ATOM	1077	CD1	LEU	360	49.589	5.935	29.236	1.00	4.15	PROT
ATOM	1078	CD2	LEU	360	50.247	6.892	31.432	1.00	18.93	PROT
ATOM	1079	C	LEU	360	51.437	3.001	32.638	1.00	19.29	PROT
ATOM	1080	O	LEU	360	50.319	2.802	33.102	1.00	27.53	PROT
ATOM	1081	N	SER	361	52.375	2.061	32.596	1.00	21.73	PROT
ATOM	1082	CA	SER	361	52.139	0.712	33.114	1.00	23.03	PROT
ATOM	1083	CB	SER	361	53.415	-0.130	33.027	1.00	25.89	PROT
ATOM	1084	OG	SER	361	53.645	-0.613	31.717	1.00	27.77	PROT
ATOM	1085	C	SER	361	51.681	0.730	34.563	1.00	23.26	PROT
ATOM	1086	O	SER	361	50.720	0.046	34.929	1.00	18.73	PROT
ATOM	1087	N	SER	362	52.388	1.524	35.367	1.00	29.84	PROT
ATOM	1088	CA	SER	362	52.141	1.668	36.799	1.00	24.49	PROT
ATOM	1089	CB	SER	362	53.435	2.089	37.491	1.00	26.14	PROT
ATOM	1090	OG	SER	362	53.917	3.305	36.949	1.00	25.03	PROT
ATOM	1091	C	SER	362	51.031	2.635	37.210	1.00	26.86	PROT
ATOM	1092	O	SER	362	50.797	2.831	38.404	1.00	39.63	PROT
ATOM	1093	N	PHE	363	50.361	3.251	36.240	1.00	20.94	PROT
ATOM	1094	CA	PHE	363	49.272	4.185	36.545	1.00	18.33	PROT
ATOM	1095	CB	PHE	363	49.191	5.294	35.486	1.00	17.03	PROT
ATOM	1096	CG	PHE	363	50.171	6.407	35.706	1.00	22.73	PROT
ATOM	1097	CD1	PHE	363	49.733	7.689	35.990	1.00	9.72	PROT
ATOM	1098	CD2	PHE	363	51.545	6.167	35.659	1.00	24.77	PROT
ATOM	1099	CE1	PHE	363	50.645	8.712	36.225	1.00	16.85	PROT
ATOM	1100	CE2	PHE	363	52.463	7.198	35.897	1.00	14.26	PROT
ATOM	1101	CZ	PHE	363	52.011	8.462	36.179	1.00	2.26	PROT
ATOM	1102	C	PHE	363	47.958	3.417	36.598	1.00	16.57	PROT
ATOM	1103	O	PHE	363	46.971	3.882	37.165	1.00	13.08	PROT
ATOM	1104	N	ASN	364	47.976	2.231	36.002	1.00	17.31	PROT
ATOM	1105	CA	ASN	364	46.819	1.349	35.949	1.00	26.11	PROT
ATOM	1106	CB	ASN	364	46.673	0.608	37.276	1.00	16.96	PROT
ATOM	1107	CG	ASN	364	47.402	-0.715	37.267	1.00	31.34	PROT
ATOM	1108	OD1	ASN	364	46.965	-1.657	36.613	1.00	36.66	PROT
ATOM	1109	ND2	ASN	364	48.527	-0.794	37.985	1.00	31.61	PROT
ATOM	1110	C	ASN	364	45.527	2.060	35.594	1.00	18.22	PROT
ATOM	1111	O	ASN	364	44.522	1.923	36.286	1.00	23.17	PROT
ATOM	1112	N	LEU	365	45.567	2.803	34.491	1.00	13.10	PROT
ATOM	1113	CA	LEU	365	44.417	3.562	34.013	1.00	15.41	PROT

ATOM	1114	CB	LEU	365	44.833	4.483	32.861	1.00	16.55	PROT
ATOM	1115	CG	LEU	365	45.762	5.653	33.181	1.00	19.56	PROT
ATOM	1116	CD1	LEU	365	46.146	6.373	31.897	1.00	6.69	PROT
ATOM	1117	CD2	LEU	365	45.067	6.602	34.128	1.00	15.69	PROT
ATOM	1118	C	LEU	365	43.328	2.624	33.520	1.00	12.07	PROT
ATOM	1119	O	LEU	365	43.620	1.534	33.043	1.00	19.81	PROT
ATOM	1120	N	ASP	366	42.077	3.047	33.653	1.00	10.86	PROT
ATOM	1121	CA	ASP	366	40.942	2.263	33.180	1.00	8.96	PROT
ATOM	1122	CB	ASP	366	39.933	2.021	34.326	1.00	9.59	PROT
ATOM	1123	CG	ASP	366	39.300	3.306	34.859	1.00	21.78	PROT
ATOM	1124	OD1	ASP	366	39.871	4.397	34.676	1.00	25.60	PROT
ATOM	1125	OD2	ASP	366	38.217	3.222	35.474	1.00	19.16	PROT
ATOM	1126	C	ASP	366	40.288	3.005	32.002	1.00	8.82	PROT
ATOM	1127	O	ASP	366	40.666	4.132	31.681	1.00	17.66	PROT
ATOM	1128	N	ASP	367	39.321	2.379	31.346	1.00	9.45	PROT
ATOM	1129	CA	ASP	367	38.668	3.023	30.218	1.00	11.11	PROT
ATOM	1130	CB	ASP	367	37.457	2.205	29.769	1.00	20.67	PROT
ATOM	1131	CG	ASP	367	37.832	0.812	29.301	1.00	25.02	PROT
ATOM	1132	OD1	ASP	367	39.040	0.525	29.158	1.00	21.06	PROT
ATOM	1133	OD2	ASP	367	36.909	0.002	29.076	1.00	31.37	PROT
ATOM	1134	C	ASP	367	38.233	4.445	30.574	1.00	14.44	PROT
ATOM	1135	O	ASP	367	38.457	5.380	29.815	1.00	26.42	PROT
ATOM	1136	N	THR	368	37.619	4.612	31.735	1.00	13.62	PROT
ATOM	1137	CA	THR	368	37.157	5.926	32.160	1.00	13.14	PROT
ATOM	1138	CB	THR	368	36.510	5.853	33.547	1.00	16.53	PROT
ATOM	1139	OG1	THR	368	35.482	4.856	33.550	1.00	10.44	PROT
ATOM	1140	CG2	THR	368	35.928	7.188	33.925	1.00	5.20	PROT
ATOM	1141	C	THR	368	38.291	6.942	32.226	1.00	13.03	PROT
ATOM	1142	O	THR	368	38.114	8.108	31.878	1.00	12.90	PROT
ATOM	1143	N	GLU	369	39.455	6.492	32.686	1.00	9.96	PROT
ATOM	1144	CA	GLU	369	40.616	7.365	32.821	1.00	7.34	PROT
ATOM	1145	CB	GLU	369	41.673	6.687	33.708	1.00	10.25	PROT
ATOM	1146	CG	GLU	369	41.584	7.113	35.189	1.00	14.56	PROT
ATOM	1147	CD	GLU	369	41.599	5.945	36.167	1.00	19.39	PROT
ATOM	1148	OE1	GLU	369	42.255	4.922	35.864	1.00	19.65	PROT
ATOM	1149	OE2	GLU	369	40.954	6.054	37.233	1.00	7.98	PROT
ATOM	1150	C	GLU	369	41.203	7.768	31.468	1.00	4.33	PROT
ATOM	1151	O	GLU	369	41.467	8.944	31.213	1.00	7.50	PROT
ATOM	1152	N	VAL	370	41.406	6.784	30.603	1.00	12.29	PROT
ATOM	1153	CA	VAL	370	41.927	7.040	29.267	1.00	19.01	PROT
ATOM	1154	CB	VAL	370	42.092	5.726	28.496	1.00	10.10	PROT
ATOM	1155	CG1	VAL	370	42.431	6.011	27.049	1.00	8.57	PROT
ATOM	1156	CG2	VAL	370	43.168	4.877	29.159	1.00	12.40	PROT
ATOM	1157	C	VAL	370	40.896	7.915	28.555	1.00	18.30	PROT
ATOM	1158	O	VAL	370	41.230	8.872	27.855	1.00	17.19	PROT
ATOM	1159	N	ALA	371	39.633	7.581	28.760	1.00	2.00	PROT

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ATOM  1160  CA  ALA  371    38.549   8.321  28.157  1.00  3.53    PROT
ATOM  1161  CB  ALA  371    37.215   7.728  28.591  1.00  9.17    PROT
ATOM  1162  C   ALA  371    38.603   9.797  28.529  1.00  9.97    PROT
ATOM  1163  O   ALA  371    38.626  10.666  27.655  1.00 24.55    PROT
ATOM  1164  N   LEU  372    38.633  10.082  29.831  1.00 14.85    PROT
ATOM  1165  CA  LEU  372    38.636  11.463  30.307  1.00  9.24    PROT
ATOM  1166  CB  LEU  372    38.480  11.501  31.830  1.00  8.83    PROT
ATOM  1167  CG  LEU  372    37.043  11.288  32.364  1.00  5.50    PROT
ATOM  1168  CD1 LEU  372    37.036  10.338  33.553  1.00  2.02    PROT
ATOM  1169  CD2 LEU  372    36.455  12.626  32.770  1.00  2.00    PROT
ATOM  1170  C   LEU  372    39.867  12.218  29.870  1.00 10.17    PROT
ATOM  1171  O   LEU  372    39.791  13.413  29.568  1.00  7.23    PROT
ATOM  1172  N   LEU  373    40.996  11.510  29.825  1.00 13.10    PROT
ATOM  1173  CA  LEU  373    42.270  12.078  29.399  1.00  2.00    PROT
ATOM  1174  CB  LEU  373    43.325  10.981  29.381  1.00  2.00    PROT
ATOM  1175  CG  LEU  373    44.705  11.118  30.045  1.00  9.64    PROT
ATOM  1176  CD1 LEU  373    44.817  12.382  30.875  1.00  2.00    PROT
ATOM  1177  CD2 LEU  373    44.955   9.883  30.882  1.00  2.00    PROT
ATOM  1178  C   LEU  373    42.026  12.602  27.987  1.00  6.58    PROT
ATOM  1179  O   LEU  373    42.357  13.738  27.660  1.00  9.73    PROT
ATOM  1180  N   GLN  374    41.401  11.763  27.165  1.00  9.45    PROT
ATOM  1181  CA  GLN  374    41.076  12.097  25.785  1.00  2.00    PROT
ATOM  1182  CB  GLN  374    40.382  10.914  25.121  1.00  2.00    PROT
ATOM  1183  CG  GLN  374    41.332   9.896  24.537  1.00  2.00    PROT
ATOM  1184  CD  GLN  374    40.630   8.641  24.095  1.00  2.00    PROT
ATOM  1185  OE1 GLN  374    41.261   7.622  23.855  1.00  8.01    PROT
ATOM  1186  NE2 GLN  374    39.316   8.705  23.989  1.00  2.00    PROT
ATOM  1187  C   GLN  374    40.187  13.326  25.694  1.00  2.78    PROT
ATOM  1188  O   GLN  374    40.427  14.213  24.875  1.00 13.91    PROT
ATOM  1189  N   ALA  375    39.151  13.386  26.521  1.00  2.00    PROT
ATOM  1190  CA  ALA  375    38.261  14.546  26.505  1.00  2.00    PROT
ATOM  1191  CB  ALA  375    37.128  14.348  27.489  1.00  3.97    PROT
ATOM  1192  C   ALA  375    39.061  15.801  26.868  1.00  4.60    PROT
ATOM  1193  O   ALA  375    38.881  16.864  26.274  1.00  8.82    PROT
ATOM  1194  N   VAL  376    39.956  15.667  27.842  1.00  9.01    PROT
ATOM  1195  CA  VAL  376    40.772  16.790  28.267  1.00  7.36    PROT
ATOM  1196  CB  VAL  376    41.669  16.401  29.467  1.00  2.30    PROT
ATOM  1197  CG1 VAL  376    42.597  17.532  29.839  1.00  2.00    PROT
ATOM  1198  CG2 VAL  376    40.801  16.076  30.646  1.00  9.15    PROT
ATOM  1199  C   VAL  376    41.629  17.256  27.110  1.00  3.94    PROT
ATOM  1200  O   VAL  376    41.788  18.455  26.880  1.00  2.00    PROT
ATOM  1201  N   LEU  377    42.179  16.297  26.379  1.00  3.92    PROT
ATOM  1202  CA  LEU  377    43.020  16.618  25.239  1.00  5.65    PROT
ATOM  1203  CB  LEU  377    43.714  15.354  24.731  1.00  5.08    PROT
ATOM  1204  CG  LEU  377    45.052  15.005  25.386  1.00  2.00    PROT
ATOM  1205  CD1 LEU  377    45.620  13.790  24.719  1.00  2.00    PROT
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ATOM	1206	CD2	LEU	377	46.016	16.157	25.264	1.00	4.14	PROT
ATOM	1207	C	LEU	377	42.173	17.271	24.137	1.00	11.35	PROT
ATOM	1208	O	LEU	377	42.607	18.240	23.515	1.00	8.78	PROT
ATOM	1209	N	LEU	378	40.959	16.766	23.912	1.00	5.62	PROT
ATOM	1210	CA	LEU	378	40.080	17.352	22.900	1.00	8.57	PROT
ATOM	1211	CB	LEU	378	38.784	16.553	22.788	1.00	5.98	PROT
ATOM	1212	CG	LEU	378	37.847	16.993	21.658	1.00	6.60	PROT
ATOM	1213	CD1	LEU	378	38.550	16.826	20.329	1.00	2.00	PROT
ATOM	1214	CD2	LEU	378	36.563	16.172	21.690	1.00	9.27	PROT
ATOM	1215	C	LEU	378	39.738	18.833	23.146	1.00	10.76	PROT
ATOM	1216	O	LEU	378	40.045	19.689	22.312	1.00	14.81	PROT
ATOM	1217	N	MET	379	39.106	19.139	24.278	1.00	13.15	PROT
ATOM	1218	CA	MET	379	38.735	20.521	24.591	1.00	13.60	PROT
ATOM	1219	CB	MET	379	37.698	20.543	25.709	1.00	12.57	PROT
ATOM	1220	CG	MET	379	36.425	19.782	25.395	1.00	21.12	PROT
ATOM	1221	SD	MET	379	35.533	20.396	23.927	1.00	15.79	PROT
ATOM	1222	CE	MET	379	34.397	19.099	23.756	1.00	13.95	PROT
ATOM	1223	C	MET	379	39.912	21.419	24.988	1.00	16.01	PROT
ATOM	1224	O	MET	379	39.981	21.897	26.121	1.00	16.95	PROT
ATOM	1225	N	SER	380	40.824	21.663	24.048	1.00	12.39	PROT
ATOM	1226	CA	SER	380	41.984	22.506	24.303	1.00	10.77	PROT
ATOM	1227	CB	SER	380	43.248	21.815	23.810	1.00	8.45	PROT
ATOM	1228	OG	SER	380	43.288	20.487	24.286	1.00	17.27	PROT
ATOM	1229	C	SER	380	41.825	23.859	23.621	1.00	15.58	PROT
ATOM	1230	O	SER	380	42.125	24.019	22.432	1.00	23.09	PROT
ATOM	1231	N	SER	381	41.368	24.837	24.396	1.00	23.65	PROT
ATOM	1232	CA	SER	381	41.123	26.187	23.904	1.00	25.18	PROT
ATOM	1233	CB	SER	381	40.449	27.018	25.003	1.00	34.78	PROT
ATOM	1234	OG	SER	381	41.250	27.073	26.170	1.00	37.79	PROT
ATOM	1235	C	SER	381	42.342	26.940	23.388	1.00	19.38	PROT
ATOM	1236	O	SER	381	42.216	28.032	22.850	1.00	28.81	PROT
ATOM	1237	N	ASP	382	43.519	26.361	23.523	1.00	11.80	PROT
ATOM	1238	CA	ASP	382	44.716	27.057	23.082	1.00	15.78	PROT
ATOM	1239	CB	ASP	382	45.908	26.595	23.909	1.00	33.97	PROT
ATOM	1240	CG	ASP	382	46.069	25.098	23.891	1.00	48.78	PROT
ATOM	1241	OD1	ASP	382	45.169	24.401	24.406	1.00	45.58	PROT
ATOM	1242	OD2	ASP	382	47.091	24.620	23.356	1.00	56.52	PROT
ATOM	1243	C	ASP	382	45.037	26.888	21.604	1.00	21.28	PROT
ATOM	1244	O	ASP	382	45.907	27.585	21.079	1.00	41.91	PROT
ATOM	1245	N	ARG	383	44.357	25.971	20.923	1.00	21.81	PROT
ATOM	1246	CA	ARG	383	44.636	25.773	19.503	1.00	18.95	PROT
ATOM	1247	CB	ARG	383	43.745	24.685	18.921	1.00	8.26	PROT
ATOM	1248	CG	ARG	383	43.580	23.491	19.821	1.00	18.07	PROT
ATOM	1249	CD	ARG	383	44.693	22.487	19.610	1.00	11.10	PROT
ATOM	1250	NE	ARG	383	44.480	21.261	20.378	1.00	20.54	PROT
ATOM	1251	CZ	ARG	383	45.460	20.462	20.786	1.00	18.25	PROT

ATOM	1252	NH1	ARG	383	45.187	19.365	21.481	1.00	5.24	PROT
ATOM	1253	NH2	ARG	383	46.717	20.765	20.495	1.00	19.21	PROT
ATOM	1254	C	ARG	383	44.420	27.064	18.728	1.00	19.64	PROT
ATOM	1255	O	ARG	383	43.493	27.828	19.001	1.00	17.46	PROT
ATOM	1256	N	PRO	384	45.298	27.342	17.762	1.00	25.37	PROT
ATOM	1257	CD	PRO	384	46.485	26.567	17.359	1.00	35.06	PROT
ATOM	1258	CA	PRO	384	45.124	28.569	16.983	1.00	27.53	PROT
ATOM	1259	CB	PRO	384	46.422	28.693	16.181	1.00	18.75	PROT
ATOM	1260	CG	PRO	384	47.041	27.338	16.190	1.00	27.78	PROT
ATOM	1261	C	PRO	384	43.895	28.476	16.081	1.00	28.76	PROT
ATOM	1262	O	PRO	384	43.562	27.402	15.560	1.00	31.18	PROT
ATOM	1263	N	GLY	385	43.215	29.606	15.917	1.00	27.37	PROT
ATOM	1264	CA	GLY	385	42.039	29.638	15.073	1.00	26.98	PROT
ATOM	1265	C	GLY	385	40.728	29.442	15.803	1.00	27.46	PROT
ATOM	1266	O	GLY	385	39.689	29.911	15.339	1.00	31.99	PROT
ATOM	1267	N	LEU	386	40.756	28.756	16.939	1.00	34.99	PROT
ATOM	1268	CA	LEU	386	39.524	28.515	17.673	1.00	37.24	PROT
ATOM	1269	CB	LEU	386	39.820	27.947	19.059	1.00	26.60	PROT
ATOM	1270	CG	LEU	386	40.233	26.472	18.988	1.00	32.45	PROT
ATOM	1271	CD1	LEU	386	40.177	25.859	20.363	1.00	34.82	PROT
ATOM	1272	CD2	LEU	386	39.314	25.719	18.030	1.00	29.64	PROT
ATOM	1273	C	LEU	386	38.733	29.795	17.778	1.00	36.93	PROT
ATOM	1274	O	LEU	386	39.291	30.881	17.674	1.00	37.60	PROT
ATOM	1275	N	ALA	387	37.427	29.665	17.962	1.00	31.47	PROT
ATOM	1276	CA	ALA	387	36.578	30.832	18.058	1.00	28.80	PROT
ATOM	1277	CB	ALA	387	35.553	30.814	16.950	1.00	41.01	PROT
ATOM	1278	C	ALA	387	35.890	30.864	19.400	1.00	28.89	PROT
ATOM	1279	O	ALA	387	35.998	31.842	20.133	1.00	30.62	PROT
ATOM	1280	N	CYS	388	35.167	29.797	19.710	1.00	25.92	PROT
ATOM	1281	CA	CYS	388	34.469	29.712	20.978	1.00	26.90	PROT
ATOM	1282	CB	CYS	388	33.224	28.823	20.826	1.00	21.38	PROT
ATOM	1283	SG	CYS	388	31.625	29.732	20.698	1.00	33.66	PROT
ATOM	1284	C	CYS	388	35.443	29.159	22.040	1.00	31.18	PROT
ATOM	1285	O	CYS	388	35.272	28.054	22.552	1.00	36.57	PROT
ATOM	1286	N	VAL	389	36.473	29.951	22.346	1.00	20.22	PROT
ATOM	1287	CA	VAL	389	37.511	29.622	23.327	1.00	16.02	PROT
ATOM	1288	CB	VAL	389	38.554	30.737	23.381	1.00	9.80	PROT
ATOM	1289	CG1	VAL	389	39.526	30.480	24.498	1.00	16.03	PROT
ATOM	1290	CG2	VAL	389	39.257	30.843	22.056	1.00	16.27	PROT
ATOM	1291	C	VAL	389	36.977	29.425	24.753	1.00	18.85	PROT
ATOM	1292	O	VAL	389	37.066	28.336	25.323	1.00	24.21	PROT
ATOM	1293	N	GLU	390	36.461	30.500	25.337	1.00	5.06	PROT
ATOM	1294	CA	GLU	390	35.908	30.434	26.660	1.00	2.00	PROT
ATOM	1295	CB	GLU	390	35.092	31.684	26.952	1.00	5.13	PROT
ATOM	1296	C	GLU	390	35.047	29.184	26.817	1.00	3.75	PROT
ATOM	1297	O	GLU	390	35.252	28.419	27.754	1.00	23.35	PROT

ATOM	1298	N	ARG	391	34.103	28.938	25.915	1.00	14.06	PROT
ATOM	1299	CA	ARG	391	33.248	27.754	26.093	1.00	26.18	PROT
ATOM	1300	CB	ARG	391	32.121	27.699	25.049	1.00	31.84	PROT
ATOM	1301	CG	ARG	391	30.843	27.040	25.601	1.00	47.73	PROT
ATOM	1302	CD	ARG	391	29.882	26.572	24.512	1.00	58.24	PROT
ATOM	1303	NE	ARG	391	29.879	27.487	23.378	1.00	66.80	PROT
ATOM	1304	CZ	ARG	391	29.001	28.470	23.211	1.00	69.56	PROT
ATOM	1305	NH1	ARG	391	29.088	29.255	22.139	1.00	66.99	PROT
ATOM	1306	NH2	ARG	391	28.034	28.663	24.105	1.00	56.08	PROT
ATOM	1307	C	ARG	391	33.979	26.415	26.110	1.00	23.65	PROT
ATOM	1308	O	ARG	391	33.561	25.479	26.794	1.00	28.58	PROT
ATOM	1309	N	ILE	392	35.064	26.316	25.359	1.00	15.05	PROT
ATOM	1310	CA	ILE	392	35.812	25.077	25.335	1.00	19.03	PROT
ATOM	1311	CB	ILE	392	36.804	25.063	24.165	1.00	22.30	PROT
ATOM	1312	CG2	ILE	392	37.971	24.130	24.467	1.00	21.71	PROT
ATOM	1313	CG1	ILE	392	36.074	24.614	22.892	1.00	23.47	PROT
ATOM	1314	CD1	ILE	392	36.245	25.551	21.707	1.00	4.13	PROT
ATOM	1315	C	ILE	392	36.544	24.907	26.671	1.00	25.03	PROT
ATOM	1316	O	ILE	392	36.728	23.783	27.153	1.00	26.11	PROT
ATOM	1317	N	GLU	393	36.947	26.029	27.266	1.00	30.74	PROT
ATOM	1318	CA	GLU	393	37.630	26.021	28.558	1.00	23.39	PROT
ATOM	1319	CB	GLU	393	38.073	27.430	28.930	1.00	27.18	PROT
ATOM	1320	CG	GLU	393	39.435	27.817	28.402	1.00	41.39	PROT
ATOM	1321	CD	GLU	393	39.990	29.051	29.093	1.00	47.72	PROT
ATOM	1322	OE1	GLU	393	39.365	29.524	30.070	1.00	39.94	PROT
ATOM	1323	OE2	GLU	393	41.051	29.547	28.653	1.00	51.17	PROT
ATOM	1324	C	GLU	393	36.655	25.516	29.610	1.00	21.72	PROT
ATOM	1325	O	GLU	393	36.942	24.574	30.344	1.00	22.82	PROT
ATOM	1326	N	LYS	394	35.497	26.163	29.676	1.00	9.64	PROT
ATOM	1327	CA	LYS	394	34.462	25.779	30.618	1.00	11.56	PROT
ATOM	1328	CB	LYS	394	33.177	26.557	30.338	1.00	7.52	PROT
ATOM	1329	C	LYS	394	34.213	24.280	30.492	1.00	16.31	PROT
ATOM	1330	O	LYS	394	34.000	23.594	31.498	1.00	24.52	PROT
ATOM	1331	N	TYR	395	34.251	23.763	29.264	1.00	12.79	PROT
ATOM	1332	CA	TYR	395	34.033	22.332	29.057	1.00	19.02	PROT
ATOM	1333	CB	TYR	395	33.803	22.025	27.572	1.00	27.90	PROT
ATOM	1334	CG	TYR	395	32.454	22.456	27.027	1.00	31.64	PROT
ATOM	1335	CD1	TYR	395	32.136	22.267	25.684	1.00	30.15	PROT
ATOM	1336	CE1	TYR	395	30.927	22.695	25.160	1.00	28.34	PROT
ATOM	1337	CD2	TYR	395	31.514	23.085	27.835	1.00	34.21	PROT
ATOM	1338	CE2	TYR	395	30.298	23.518	27.317	1.00	34.01	PROT
ATOM	1339	CZ	TYR	395	30.014	23.322	25.979	1.00	33.73	PROT
ATOM	1340	OH	TYR	395	28.824	23.785	25.453	1.00	44.99	PROT
ATOM	1341	C	TYR	395	35.208	21.490	29.584	1.00	19.03	PROT
ATOM	1342	O	TYR	395	35.003	20.494	30.277	1.00	25.23	PROT
ATOM	1343	N	GLN	396	36.437	21.883	29.256	1.00	17.76	PROT

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ATOM   1344  CA  GLN   396    37.596  21.134  29.725  1.00 13.73    PROT
ATOM   1345  CB  GLN   396    38.905  21.766  29.240  1.00  2.45    PROT
ATOM   1346  CG  GLN   396    40.061  20.767  29.110  1.00  2.00    PROT
ATOM   1347  CD  GLN   396    41.388  21.439  28.799  1.00  5.12    PROT
ATOM   1348  OE1 GLN   396    41.706  22.484  29.359  1.00 10.11    PROT
ATOM   1349  NE2 GLN   396    42.169  20.840  27.903  1.00  9.09    PROT
ATOM   1350  C   GLN   396    37.562  21.149  31.238  1.00 17.65    PROT
ATOM   1351  O   GLN   396    37.802  20.125  31.894  1.00  9.63    PROT
ATOM   1352  N   ASP   397    37.250  22.319  31.787  1.00  6.69    PROT
ATOM   1353  CA  ASP   397    37.178  22.476  33.226  1.00  9.36    PROT
ATOM   1354  CB  ASP   397    36.732  23.893  33.570  1.00 11.44    PROT
ATOM   1355  CG  ASP   397    37.867  24.891  33.446  1.00 18.32    PROT
ATOM   1356  OD1 ASP   397    39.033  24.438  33.397  1.00 24.00    PROT
ATOM   1357  OD2 ASP   397    37.615  26.114  33.395  1.00 20.67    PROT
ATOM   1358  C   ASP   397    36.215  21.443  33.771  1.00  7.77    PROT
ATOM   1359  O   ASP   397    36.497  20.771  34.761  1.00  7.66    PROT
ATOM   1360  N   SER   398    35.087  21.293  33.093  1.00  9.19    PROT
ATOM   1361  CA  SER   398    34.094  20.322  33.508  1.00 14.18    PROT
ATOM   1362  CB  SER   398    32.916  20.334  32.542  1.00 12.11    PROT
ATOM   1363  OG  SER   398    32.406  21.650  32.423  1.00 31.95    PROT
ATOM   1364  C   SER   398    34.712  18.939  33.556  1.00 11.47    PROT
ATOM   1365  O   SER   398    34.591  18.227  34.551  1.00 21.11    PROT
ATOM   1366  N   PHE   399    35.394  18.565  32.485  1.00 18.68    PROT
ATOM   1367  CA  PHE   399    36.017  17.252  32.417  1.00 24.93    PROT
ATOM   1368  CB  PHE   399    36.587  17.012  31.014  1.00 23.38    PROT
ATOM   1369  CG  PHE   399    35.543  16.705  29.981  1.00 20.19    PROT
ATOM   1370  CD1 PHE   399    35.224  17.638  28.997  1.00 22.94    PROT
ATOM   1371  CD2 PHE   399    34.878  15.486  29.988  1.00  8.62    PROT
ATOM   1372  CE1 PHE   399    34.257  17.361  28.029  1.00 12.53    PROT
ATOM   1373  CE2 PHE   399    33.914  15.201  29.027  1.00 19.25    PROT
ATOM   1374  CZ  PHE   399    33.604  16.143  28.044  1.00 15.15    PROT
ATOM   1375  C   PHE   399    37.113  17.097  33.463  1.00 23.06    PROT
ATOM   1376  O   PHE   399    37.210  16.063  34.137  1.00 15.58    PROT
ATOM   1377  N   LEU   400    37.932  18.131  33.604  1.00 22.12    PROT
ATOM   1378  CA  LEU   400    39.017  18.095  34.567  1.00 18.27    PROT
ATOM   1379  CB  LEU   400    39.846  19.372  34.461  1.00 10.06    PROT
ATOM   1380  CG  LEU   400    41.021  19.248  33.491  1.00  8.13    PROT
ATOM   1381  CD1 LEU   400    41.616  20.594  33.195  1.00  2.00    PROT
ATOM   1382  CD2 LEU   400    42.055  18.333  34.095  1.00 13.73    PROT
ATOM   1383  C   LEU   400    38.527  17.892  36.002  1.00 24.79    PROT
ATOM   1384  O   LEU   400    39.189  17.228  36.787  1.00 26.46    PROT
ATOM   1385  N   LEU   401    37.371  18.447  36.354  1.00 21.93    PROT
ATOM   1386  CA  LEU   401    36.862  18.268  37.707  1.00 17.21    PROT
ATOM   1387  CB  LEU   401    35.766  19.285  38.022  1.00 19.27    PROT
ATOM   1388  CG  LEU   401    35.538  19.547  39.515  1.00 16.76    PROT
ATOM   1389  CD1 LEU   401    36.652  20.403  40.085  1.00  2.00    PROT
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ATOM	1390	CD2	LEU	401	34.206	20.235	39.687	1.00	14.41	PROT
ATOM	1391	C	LEU	401	36.316	16.864	37.879	1.00	18.03	PROT
ATOM	1392	O	LEU	401	36.482	16.250	38.925	1.00	28.63	PROT
ATOM	1393	N	ALA	402	35.656	16.346	36.856	1.00	9.30	PROT
ATOM	1394	CA	ALA	402	35.124	15.000	36.951	1.00	7.03	PROT
ATOM	1395	CB	ALA	402	34.233	14.703	35.758	1.00	14.15	PROT
ATOM	1396	C	ALA	402	36.298	14.029	36.989	1.00	7.68	PROT
ATOM	1397	O	ALA	402	36.294	13.054	37.739	1.00	2.00	PROT
ATOM	1398	N	PHE	403	37.311	14.305	36.178	1.00	4.49	PROT
ATOM	1399	CA	PHE	403	38.477	13.439	36.140	1.00	9.18	PROT
ATOM	1400	CB	PHE	403	39.510	13.977	35.138	1.00	12.80	PROT
ATOM	1401	CG	PHE	403	40.545	12.957	34.693	1.00	5.42	PROT
ATOM	1402	CD1	PHE	403	41.590	13.334	33.859	1.00	2.00	PROT
ATOM	1403	CD2	PHE	403	40.480	11.634	35.103	1.00	2.00	PROT
ATOM	1404	CE1	PHE	403	42.546	12.410	33.448	1.00	2.00	PROT
ATOM	1405	CE2	PHE	403	41.440	10.711	34.688	1.00	2.00	PROT
ATOM	1406	CZ	PHE	403	42.468	11.100	33.863	1.00	2.00	PROT
ATOM	1407	C	PHE	403	39.080	13.366	37.539	1.00	10.08	PROT
ATOM	1408	O	PHE	403	39.207	12.279	38.097	1.00	8.23	PROT
ATOM	1409	N	GLU	404	39.451	14.514	38.103	1.00	12.64	PROT
ATOM	1410	CA	GLU	404	40.030	14.546	39.448	1.00	19.23	PROT
ATOM	1411	CB	GLU	404	40.227	15.989	39.942	1.00	19.80	PROT
ATOM	1412	CG	GLU	404	41.532	16.220	40.728	1.00	24.03	PROT
ATOM	1413	CD	GLU	404	41.474	17.429	41.655	1.00	29.60	PROT
ATOM	1414	OE1	GLU	404	41.706	18.565	41.182	1.00	29.51	PROT
ATOM	1415	OE2	GLU	404	41.197	17.247	42.861	1.00	30.42	PROT
ATOM	1416	C	GLU	404	39.112	13.806	40.416	1.00	24.36	PROT
ATOM	1417	O	GLU	404	39.571	12.963	41.200	1.00	28.04	PROT
ATOM	1418	N	HIS	405	37.815	14.108	40.358	1.00	10.26	PROT
ATOM	1419	CA	HIS	405	36.870	13.446	41.240	1.00	7.78	PROT
ATOM	1420	CB	HIS	405	35.473	14.023	41.054	1.00	3.47	PROT
ATOM	1421	CG	HIS	405	35.312	15.393	41.630	1.00	15.49	PROT
ATOM	1422	CD2	HIS	405	36.223	16.260	42.134	1.00	17.97	PROT
ATOM	1423	ND1	HIS	405	34.096	16.036	41.694	1.00	21.57	PROT
ATOM	1424	CE1	HIS	405	34.265	17.242	42.210	1.00	27.50	PROT
ATOM	1425	NE2	HIS	405	35.547	17.403	42.485	1.00	13.53	PROT
ATOM	1426	C	HIS	405	36.856	11.936	41.005	1.00	14.88	PROT
ATOM	1427	O	HIS	405	36.641	11.155	41.935	1.00	22.11	PROT
ATOM	1428	N	TYR	406	37.091	11.512	39.767	1.00	16.52	PROT
ATOM	1429	CA	TYR	406	37.085	10.083	39.491	1.00	14.35	PROT
ATOM	1430	CB	TYR	406	37.007	9.808	37.989	1.00	9.90	PROT
ATOM	1431	CG	TYR	406	36.840	8.346	37.657	1.00	2.00	PROT
ATOM	1432	CD1	TYR	406	35.587	7.742	37.676	1.00	8.84	PROT
ATOM	1433	CE1	TYR	406	35.433	6.382	37.386	1.00	8.78	PROT
ATOM	1434	CD2	TYR	406	37.939	7.562	37.338	1.00	15.34	PROT
ATOM	1435	CE2	TYR	406	37.801	6.204	37.044	1.00	13.48	PROT

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ATOM  1436 CZ  TYR  406    36.548   5.624  37.073  1.00 15.64    PROT
ATOM  1437 OH  TYR  406    36.431   4.287  36.804  1.00  2.00    PROT
ATOM  1438 C   TYR  406    38.340   9.466  40.071  1.00  9.54    PROT
ATOM  1439 O   TYR  406    38.328   8.328  40.525  1.00 14.29    PROT
ATOM  1440 N   ILE  407    39.430  10.217  40.058  1.00  6.56    PROT
ATOM  1441 CA  ILE  407    40.671   9.708  40.617  1.00 13.87    PROT
ATOM  1442 CB  ILE  407    41.808  10.728  40.474  1.00 11.28    PROT
ATOM  1443 CG2 ILE  407    42.902  10.413  41.461  1.00  6.25    PROT
ATOM  1444 CG1 ILE  407    42.357  10.714  39.039  1.00 18.73    PROT
ATOM  1445 CD1 ILE  407    41.863   9.579  38.169  1.00 13.14    PROT
ATOM  1446 C   ILE  407    40.438   9.426  42.091  1.00 11.44    PROT
ATOM  1447 O   ILE  407    40.691   8.325  42.571  1.00  4.46    PROT
ATOM  1448 N   ASN  408    39.953  10.448  42.792  1.00 12.35    PROT
ATOM  1449 CA  ASN  408    39.642  10.363  44.213  1.00  2.00    PROT
ATOM  1450 CB  ASN  408    38.758  11.535  44.629  1.00  2.00    PROT
ATOM  1451 CG  ASN  408    39.499  12.840  44.657  1.00  3.57    PROT
ATOM  1452 OD1 ASN  408    40.733  12.859  44.656  1.00 14.35    PROT
ATOM  1453 ND2 ASN  408    38.758  13.949  44.689  1.00  2.00    PROT
ATOM  1454 C   ASN  408    38.868   9.078  44.432  1.00  6.49    PROT
ATOM  1455 O   ASN  408    39.282   8.187  45.178  1.00 10.45    PROT
ATOM  1456 N   TYR  409    37.731   8.987  43.766  1.00  2.00    PROT
ATOM  1457 CA  TYR  409    36.900   7.816  43.893  1.00  9.20    PROT
ATOM  1458 CB  TYR  409    35.879   7.783  42.760  1.00 11.66    PROT
ATOM  1459 CG  TYR  409    35.121   6.489  42.683  1.00 12.54    PROT
ATOM  1460 CD1 TYR  409    33.984   6.281  43.456  1.00 29.23    PROT
ATOM  1461 CE1 TYR  409    33.285   5.077  43.403  1.00 25.45    PROT
ATOM  1462 CD2 TYR  409    35.547   5.465  41.850  1.00 24.96    PROT
ATOM  1463 CE2 TYR  409    34.860   4.259  41.788  1.00 33.40    PROT
ATOM  1464 CZ  TYR  409    33.733   4.074  42.567  1.00 24.27    PROT
ATOM  1465 OH  TYR  409    33.065   2.883  42.509  1.00 32.72    PROT
ATOM  1466 C   TYR  409    37.753   6.553  43.867  1.00 13.96    PROT
ATOM  1467 O   TYR  409    37.730   5.763  44.804  1.00 29.48    PROT
ATOM  1468 N   ARG  410    38.531   6.399  42.803  1.00 23.04    PROT
ATOM  1469 CA  ARG  410    39.377   5.230  42.588  1.00 22.09    PROT
ATOM  1470 CB  ARG  410    39.982   5.327  41.190  1.00 13.24    PROT
ATOM  1471 CG  ARG  410    38.947   5.399  40.090  1.00 14.01    PROT
ATOM  1472 CD  ARG  410    38.934   4.111  39.275  1.00 16.49    PROT
ATOM  1473 NE  ARG  410    40.227   3.848  38.651  1.00  9.77    PROT
ATOM  1474 CZ  ARG  410    40.617   2.651  38.239  1.00 11.38    PROT
ATOM  1475 NH1 ARG  410    41.806   2.493  37.685  1.00 14.94    PROT
ATOM  1476 NH2 ARG  410    39.810   1.613  38.375  1.00 12.78    PROT
ATOM  1477 C   ARG  410    40.486   4.914  43.604  1.00 24.49    PROT
ATOM  1478 O   ARG  410    40.860   3.753  43.780  1.00 12.85    PROT
ATOM  1479 N   LYS  411    41.023   5.931  44.262  1.00 24.16    PROT
ATOM  1480 CA  LYS  411    42.085   5.706  45.235  1.00 27.14    PROT
ATOM  1481 CB  LYS  411    41.525   5.069  46.516  1.00 37.40    PROT
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ATOM	1482	CG	LYS	411	40.317	5.779	47.103	1.00	35.00	PROT
ATOM	1483	CD	LYS	411	39.406	4.788	47.804	1.00	40.83	PROT
ATOM	1484	CE	LYS	411	38.414	5.496	48.725	1.00	58.04	PROT
ATOM	1485	NZ	LYS	411	38.833	5.496	50.168	1.00	54.40	PROT
ATOM	1486	C	LYS	411	43.186	4.814	44.664	1.00	28.02	PROT
ATOM	1487	O-	LYS	411	43.209	3.598	44.876	1.00	25.00	PROT
ATOM	1488	N	HIS	412	44.091	5.438	43.923	1.00	30.05	PROT
ATOM	1489	CA	HIS	412	45.223	4.738	43.332	1.00	26.70	PROT
ATOM	1490	CB	HIS	412	45.756	5.491	42.104	1.00	29.28	PROT
ATOM	1491	CG	HIS	412	44.953	5.289	40.857	1.00	18.44	PROT
ATOM	1492	CD2	HIS	412	43.783	5.836	40.451	1.00	19.98	PROT
ATOM	1493	ND1	HIS	412	45.366	4.465	39.833	1.00	16.33	PROT
ATOM	1494	CE1	HIS	412	44.486	4.513	38.850	1.00	24.80	PROT
ATOM	1495	NE2	HIS	412	43.516	5.338	39.200	1.00	23.01	PROT
ATOM	1496	C	HIS	412	46.281	4.788	44.406	1.00	20.73	PROT
ATOM	1497	O	HIS	412	46.335	5.740	45.171	1.00	24.69	PROT
ATOM	1498	N	HIS	413	47.138	3.784	44.461	1.00	28.17	PROT
ATOM	1499	CA	HIS	413	48.183	3.788	45.465	1.00	28.09	PROT
ATOM	1500	CB	HIS	413	48.219	2.426	46.144	1.00	21.71	PROT
ATOM	1501	CG	HIS	413	46.906	2.053	46.759	1.00	44.26	PROT
ATOM	1502	CD2	HIS	413	46.140	0.941	46.632	1.00	43.48	PROT
ATOM	1503	ND1	HIS	413	46.214	2.902	47.600	1.00	40.00	PROT
ATOM	1504	CE1	HIS	413	45.080	2.328	47.962	1.00	47.35	PROT
ATOM	1505	NE2	HIS	413	45.011	1.137	47.390	1.00	35.50	PROT
ATOM	1506	C	HIS	413	49.527	4.194	44.875	1.00	26.49	PROT
ATOM	1507	O	HIS	413	50.483	3.421	44.829	1.00	31.82	PROT
ATOM	1508	N	VAL	414	49.555	5.439	44.411	1.00	18.32	PROT
ATOM	1509	CA	VAL	414	50.726	6.069	43.820	1.00	22.60	PROT
ATOM	1510	CB	VAL	414	50.718	5.966	42.290	1.00	32.50	PROT
ATOM	1511	CG1	VAL	414	51.636	7.026	41.694	1.00	33.83	PROT
ATOM	1512	CG2	VAL	414	51.169	4.574	41.863	1.00	40.20	PROT
ATOM	1513	C	VAL	414	50.630	7.529	44.225	1.00	17.96	PROT
ATOM	1514	O	VAL	414	49.708	8.236	43.829	1.00	30.33	PROT
ATOM	1515	N	THR	415	51.586	7.969	45.028	1.00	32.51	PROT
ATOM	1516	CA	THR	415	51.601	9.332	45.531	1.00	35.31	PROT
ATOM	1517	CB	THR	415	52.779	9.529	46.511	1.00	49.75	PROT
ATOM	1518	OG1	THR	415	53.023	10.930	46.702	1.00	60.64	PROT
ATOM	1519	CG2	THR	415	54.038	8.850	45.974	1.00	50.83	PROT
ATOM	1520	C	THR	415	51.668	10.387	44.436	1.00	31.44	PROT
ATOM	1521	O	THR	415	52.423	10.251	43.475	1.00	22.01	PROT
ATOM	1522	N	HIS	416	50.865	11.437	44.607	1.00	24.94	PROT
ATOM	1523	CA	HIS	416	50.781	12.559	43.671	1.00	27.82	PROT
ATOM	1524	CB	HIS	416	52.163	13.164	43.440	1.00	32.98	PROT
ATOM	1525	CG	HIS	416	52.776	13.747	44.671	1.00	44.74	PROT
ATOM	1526	CD2	HIS	416	53.982	13.539	45.251	1.00	44.91	PROT
ATOM	1527	ND1	HIS	416	52.121	14.665	45.462	1.00	49.20	PROT

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ATOM  1528 CE1 HIS  416    52.899 15.000 46.477 1.00 53.14    PROT
ATOM  1529 NE2 HIS  416    54.033 14.330 46.373 1.00 41.72    PROT
ATOM  1530 C   HIS  416    50.176 12.172 42.328 1.00 29.13    PROT
ATOM  1531 O   HIS  416    50.612 12.660 41.286 1.00 37.24    PROT
ATOM  1532 N   PHE  417    49.163 11.311 42.350 1.00 18.38    PROT
ATOM  1533 CA  PHE  417    48.528 10.867 41.115 1.00 16.08    PROT
ATOM  1534 CB  PHE  417    47.295 10.029 41.407 1.00 17.89    PROT
ATOM  1535 CG  PHE  417    47.021  8.997 40.364 1.00 16.15    PROT
ATOM  1536 CD1 PHE  417    47.980  8.044 40.051 1.00 16.55    PROT
ATOM  1537 CD2 PHE  417    45.806  8.971 39.696 1.00 15.49    PROT
ATOM  1538 CE1 PHE  417    47.727  7.081 39.087 1.00 19.81    PROT
ATOM  1539 CE2 PHE  417    45.544  8.008 38.731 1.00  9.76    PROT
ATOM  1540 CZ  PHE  417    46.501  7.064 38.427 1.00  5.25    PROT
ATOM  1541 C   PHE  417    48.117 11.990 40.187 1.00 14.51    PROT
ATOM  1542 O   PHE  417    48.636 12.119 39.081 1.00 18.44    PROT
ATOM  1543 N   TRP  418    47.171 12.800 40.640 1.00 21.08    PROT
ATOM  1544 CA  TRP  418    46.688 13.900 39.828 1.00 16.28    PROT
ATOM  1545 CB  TRP  418    45.796 14.832 40.659 1.00 15.19    PROT
ATOM  1546 CG  TRP  418    45.002 15.746 39.802 1.00 16.60    PROT
ATOM  1547 CD2 TRP  418    44.165 15.369 38.710 1.00 21.85    PROT
ATOM  1548 CE2 TRP  418    43.690 16.557 38.118 1.00 22.53    PROT
ATOM  1549 CE3 TRP  418    43.771 14.138 38.170 1.00 16.42    PROT
ATOM  1550 CD1 TRP  418    44.999 17.107 39.836 1.00 21.01    PROT
ATOM  1551 NE1 TRP  418    44.215 17.606 38.826 1.00 24.02    PROT
ATOM  1552 CZ2 TRP  418    42.838 16.555 37.010 1.00 24.64    PROT
ATOM  1553 CZ3 TRP  418    42.925 14.135 37.069 1.00 28.80    PROT
ATOM  1554 CH2 TRP  418    42.467 15.337 36.500 1.00 21.25    PROT
ATOM  1555 C   TRP  418    47.834 14.676 39.192 1.00 16.17    PROT
ATOM  1556 O   TRP  418    47.928 14.764 37.977 1.00 19.51    PROT
ATOM  1557 N   PRO  419    48.723 15.250 40.007 1.00 19.59    PROT
ATOM  1558 CD  PRO  419    48.757 15.274 41.477 1.00 19.81    PROT
ATOM  1559 CA  PRO  419    49.837 16.002 39.429 1.00 17.87    PROT
ATOM  1560 CB  PRO  419    50.720 16.309 40.629 1.00  6.85    PROT
ATOM  1561 CG  PRO  419    49.785 16.326 41.764 1.00 25.11    PROT
ATOM  1562 C   PRO  419    50.578 15.202 38.373 1.00 15.44    PROT
ATOM  1563 O   PRO  419    50.922 15.720 37.315 1.00 24.75    PROT
ATOM  1564 N   LYS  420    50.811 13.932 38.664 1.00 15.10    PROT
ATOM  1565 CA  LYS  420    51.534 13.056 37.748 1.00 20.59    PROT
ATOM  1566 CB  LYS  420    51.900 11.746 38.471 1.00 28.85    PROT
ATOM  1567 CG  LYS  420    52.955 11.906 39.577 1.00 30.61    PROT
ATOM  1568 CD  LYS  420    52.907 10.759 40.580 1.00 24.41    PROT
ATOM  1569 CE  LYS  420    54.275 10.493 41.224 1.00 31.94    PROT
ATOM  1570 NZ  LYS  420    54.485  9.040 41.557 1.00 27.34    PROT
ATOM  1571 C   LYS  420    50.779 12.757 36.445 1.00 17.36    PROT
ATOM  1572 O   LYS  420    51.393 12.439 35.437 1.00 26.28    PROT
ATOM  1573 N   LEU  421    49.455 12.859 36.474 1.00 16.34    PROT
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ATOM	1574	CA	LEU	421	48.627	12.614	35.297	1.00	9.38	PROT
ATOM	1575	CB	LEU	421	47.231	12.139	35.707	1.00	13.22	PROT
ATOM	1576	CG	LEU	421	46.739	10.818	35.107	1.00	15.75	PROT
ATOM	1577	CD1	LEU	421	47.919	9.993	34.652	1.00	29.24	PROT
ATOM	1578	CD2	LEU	421	45.949	10.049	36.135	1.00	12.19	PROT
ATOM	1579	C-	LEU	421	48.511	13.866	34.441	1.00	12.61	PROT
ATOM	1580	O	LEU	421	48.458	13.777	33.223	1.00	17.85	PROT
ATOM	1581	N	LEU	422	48.451	15.036	35.063	1.00	8.47	PROT
ATOM	1582	CA	LEU	422	48.393	16.254	34.277	1.00	7.21	PROT
ATOM	1583	CB	LEU	422	48.160	17.468	35.164	1.00	2.00	PROT
ATOM	1584	CG	LEU	422	46.941	17.445	36.088	1.00	12.16	PROT
ATOM	1585	CD1	LEU	422	47.024	18.660	36.982	1.00	6.96	PROT
ATOM	1586	CD2	LEU	422	45.632	17.450	35.313	1.00	2.00	PROT
ATOM	1587	C	LEU	422	49.748	16.365	33.567	1.00	10.59	PROT
ATOM	1588	O	LEU	422	49.851	16.938	32.477	1.00	13.48	PROT
ATOM	1589	N	MET	423	50.786	15.804	34.185	1.00	2.29	PROT
ATOM	1590	CA	MET	423	52.109	15.821	33.579	1.00	6.50	PROT
ATOM	1591	CB	MET	423	53.158	15.215	34.514	1.00	2.13	PROT
ATOM	1592	CG	MET	423	53.361	15.968	35.803	1.00	16.33	PROT
ATOM	1593	SD	MET	423	55.075	16.415	36.070	1.00	26.66	PROT
ATOM	1594	CE	MET	423	55.751	14.880	36.623	1.00	20.24	PROT
ATOM	1595	C	MET	423	52.016	14.966	32.318	1.00	12.20	PROT
ATOM	1596	O	MET	423	52.741	15.183	31.345	1.00	18.67	PROT
ATOM	1597	N	LYS	424	51.114	13.988	32.352	1.00	7.89	PROT
ATOM	1598	CA	LYS	424	50.907	13.084	31.230	1.00	12.91	PROT
ATOM	1599	CB	LYS	424	49.990	11.924	31.645	1.00	5.14	PROT
ATOM	1600	CG	LYS	424	50.669	10.579	31.980	1.00	11.76	PROT
ATOM	1601	CD	LYS	424	52.187	10.590	31.866	1.00	3.70	PROT
ATOM	1602	CE	LYS	424	52.844	10.020	33.113	1.00	7.84	PROT
ATOM	1603	NZ	LYS	424	54.335	9.959	32.995	1.00	25.86	PROT
ATOM	1604	C	LYS	424	50.293	13.840	30.046	1.00	17.44	PROT
ATOM	1605	O	LYS	424	50.650	13.596	28.897	1.00	11.72	PROT
ATOM	1606	N	VAL	425	49.370	14.756	30.322	1.00	3.16	PROT
ATOM	1607	CA	VAL	425	48.768	15.515	29.249	1.00	2.00	PROT
ATOM	1608	CB	VAL	425	47.744	16.532	29.773	1.00	6.77	PROT
ATOM	1609	CG1	VAL	425	47.653	17.716	28.815	1.00	2.00	PROT
ATOM	1610	CG2	VAL	425	46.381	15.870	29.914	1.00	10.91	PROT
ATOM	1611	C	VAL	425	49.845	16.274	28.487	1.00	4.83	PROT
ATOM	1612	O	VAL	425	49.853	16.265	27.269	1.00	15.69	PROT
ATOM	1613	N	THR	426	50.753	16.924	29.208	1.00	14.38	PROT
ATOM	1614	CA	THR	426	51.824	17.707	28.593	1.00	12.41	PROT
ATOM	1615	CB	THR	426	52.713	18.372	29.667	1.00	12.49	PROT
ATOM	1616	OG1	THR	426	51.890	19.138	30.552	1.00	11.06	PROT
ATOM	1617	CG2	THR	426	53.763	19.283	29.015	1.00	2.93	PROT
ATOM	1618	C	THR	426	52.734	16.928	27.653	1.00	15.72	PROT
ATOM	1619	O	THR	426	53.198	17.463	26.651	1.00	14.40	PROT

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ATOM   1620  N   ASP  427    53.000  15.672  27.981  1.00 16.23    PROT
ATOM   1621  CA  ASP  427    53.865  14.843  27.157  1.00 16.35    PROT
ATOM   1622  CB  ASP  427    54.342  13.630  27.950  1.00 19.48    PROT
ATOM   1623  CG  ASP  427    55.337  13.997  29.029  1.00 18.96    PROT
ATOM   1624  OD1 ASP  427    55.874  15.125  29.010  1.00  8.75    PROT
ATOM   1625  OD2 ASP  427    55.579  13.145  29.902  1.00 24.25    PROT
ATOM   1626  C   ASP  427    53.155  14.381  25.891  1.00 20.52    PROT
ATOM   1627  O   ASP  427    53.793  14.164  24.856  1.00 25.69    PROT
ATOM   1628  N   LEU  428    51.838  14.218  25.986  1.00  5.49    PROT
ATOM   1629  CA  LEU  428    51.040  13.815  24.849  1.00  2.00    PROT
ATOM   1630  CB  LEU  428    49.634  13.470  25.301  1.00  2.00    PROT
ATOM   1631  CG  LEU  428    49.579  12.127  26.028  1.00  2.00    PROT
ATOM   1632  CD1 LEU  428    48.184  11.789  26.481  1.00  2.00    PROT
ATOM   1633  CD2 LEU  428    50.088  11.080  25.108  1.00  2.00    PROT
ATOM   1634  C   LEU  428    51.019  14.987  23.881  1.00  7.72    PROT
ATOM   1635  O   LEU  428    51.072  14.800  22.666  1.00  9.22    PROT
ATOM   1636  N   ARG  429    50.961  16.197  24.432  1.00 10.07    PROT
ATOM   1637  CA  ARG  429    50.948  17.438  23.659  1.00  7.97    PROT
ATOM   1638  CB  ARG  429    50.799  18.642  24.583  1.00 18.55    PROT
ATOM   1639  CG  ARG  429    49.548  18.634  25.429  1.00 14.80    PROT
ATOM   1640  CD  ARG  429    48.588  19.674  24.935  1.00 32.08    PROT
ATOM   1641  NE  ARG  429    47.508  19.923  25.880  1.00 42.46    PROT
ATOM   1642  CZ  ARG  429    46.226  19.673  25.631  1.00 48.51    PROT
ATOM   1643  NH1 ARG  429    45.860  19.163  24.459  1.00 33.35    PROT
ATOM   1644  NH2 ARG  429    45.307  19.955  26.549  1.00 46.08    PROT
ATOM   1645  C   ARG  429    52.260  17.557  22.919  1.00 11.77    PROT
ATOM   1646  O   ARG  429    52.298  17.904  21.737  1.00 28.66    PROT
ATOM   1647  N   MET  430    53.343  17.270  23.629  1.00 20.26    PROT
ATOM   1648  CA  MET  430    54.671  17.328  23.042  1.00 21.06    PROT
ATOM   1649  CB  MET  430    55.738  17.015  24.100  1.00 30.24    PROT
ATOM   1650  CG  MET  430    56.061  18.165  25.056  1.00 34.66    PROT
ATOM   1651  SD  MET  430    55.727  19.795  24.373  1.00 35.91    PROT
ATOM   1652  CE  MET  430    56.839  19.814  22.978  1.00 32.52    PROT
ATOM   1653  C   MET  430    54.735  16.302  21.925  1.00 18.70    PROT
ATOM   1654  O   MET  430    55.287  16.560  20.860  1.00 16.59    PROT
ATOM   1655  N   ILE  431    54.161  15.133  22.182  1.00 15.38    PROT
ATOM   1656  CA  ILE  431    54.144  14.069  21.196  1.00 15.85    PROT
ATOM   1657  CB  ILE  431    53.326  12.859  21.705  1.00 13.76    PROT
ATOM   1658  CG2 ILE  431    52.727  12.084  20.539  1.00 11.11    PROT
ATOM   1659  CG1 ILE  431    54.239  11.924  22.489  1.00 11.72    PROT
ATOM   1660  CD1 ILE  431    53.552  11.224  23.615  1.00 16.22    PROT
ATOM   1661  C   ILE  431    53.538  14.609  19.904  1.00 18.49    PROT
ATOM   1662  O   ILE  431    54.134  14.483  18.839  1.00 17.36    PROT
ATOM   1663  N   GLY  432    52.361  15.220  20.003  1.00  2.00    PROT
ATOM   1664  CA  GLY  432    51.721  15.772  18.831  1.00  2.00    PROT
ATOM   1665  C   GLY  432    52.542  16.851  18.148  1.00 10.55    PROT
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ATOM	1666	O	GLY	432	52.707	16.834	16.936	1.00	9.60	PROT
ATOM	1667	N	ALA	433	53.043	17.805	18.926	1.00	11.17	PROT
ATOM	1668	CA	ALA	433	53.855	18.884	18.385	1.00	2.00	PROT
ATOM	1669	CB	ALA	433	54.326	19.771	19.506	1.00	2.00	PROT
ATOM	1670	C	ALA	433	55.050	18.285	17.646	1.00	6.43	PROT
ATOM	1671	O-	ALA	433	55.493	18.789	16.623	1.00	11.71	PROT
ATOM	1672	N	CYS	434	55.579	17.197	18.179	1.00	15.71	PROT
ATOM	1673	CA	CYS	434	56.715	16.534	17.573	1.00	13.44	PROT
ATOM	1674	CB	CYS	434	57.228	15.464	18.518	1.00	14.76	PROT
ATOM	1675	SG	CYS	434	58.910	15.703	18.985	1.00	20.82	PROT
ATOM	1676	C	CYS	434	56.269	15.902	16.264	1.00	9.28	PROT
ATOM	1677	O	CYS	434	56.969	15.948	15.256	1.00	8.50	PROT
ATOM	1678	N	HIS	435	55.091	15.300	16.298	1.00	11.04	PROT
ATOM	1679	CA	HIS	435	54.533	14.657	15.122	1.00	11.30	PROT
ATOM	1680	CB	HIS	435	53.142	14.132	15.438	1.00	4.30	PROT
ATOM	1681	CG	HIS	435	52.480	13.460	14.283	1.00	13.68	PROT
ATOM	1682	CD2	HIS	435	52.751	12.288	13.662	1.00	4.72	PROT
ATOM	1683	ND1	HIS	435	51.358	13.976	13.666	1.00	5.53	PROT
ATOM	1684	CE1	HIS	435	50.966	13.147	12.717	1.00	12.84	PROT
ATOM	1685	NE2	HIS	435	51.794	12.116	12.694	1.00	15.77	PROT
ATOM	1686	C	HIS	435	54.482	15.661	13.973	1.00	8.50	PROT
ATOM	1687	O	HIS	435	54.941	15.370	12.869	1.00	14.82	PROT
ATOM	1688	N	ALA	436	53.938	16.844	14.245	1.00	5.74	PROT
ATOM	1689	CA	ALA	436	53.843	17.905	13.252	1.00	2.00	PROT
ATOM	1690	CB	ALA	436	53.632	19.241	13.942	1.00	2.00	PROT
ATOM	1691	C	ALA	436	55.121	17.934	12.406	1.00	8.68	PROT
ATOM	1692	O	ALA	436	55.080	17.712	11.193	1.00	15.14	PROT
ATOM	1693	N	SER	437	56.256	18.189	13.047	1.00	6.82	PROT
ATOM	1694	CA	SER	437	57.522	18.226	12.337	1.00	9.05	PROT
ATOM	1695	CB	SER	437	58.671	18.511	13.295	1.00	2.00	PROT
ATOM	1696	OG	SER	437	59.593	19.406	12.699	1.00	21.18	PROT
ATOM	1697	C	SER	437	57.758	16.896	11.637	1.00	15.18	PROT
ATOM	1698	O	SER	437	58.076	16.849	10.445	1.00	19.33	PROT
ATOM	1699	N	ARG	438	57.607	15.805	12.373	1.00	16.98	PROT
ATOM	1700	CA	ARG	438	57.799	14.501	11.766	1.00	16.98	PROT
ATOM	1701	CB	ARG	438	57.294	13.409	12.702	1.00	24.77	PROT
ATOM	1702	CG	ARG	438	58.006	12.086	12.534	1.00	33.76	PROT
ATOM	1703	CD	ARG	438	59.506	12.280	12.614	1.00	30.64	PROT
ATOM	1704	NE	ARG	438	60.219	11.380	11.721	1.00	29.76	PROT
ATOM	1705	CZ	ARG	438	61.505	11.504	11.423	1.00	25.21	PROT
ATOM	1706	NH1	ARG	438	62.077	10.641	10.603	1.00	39.58	PROT
ATOM	1707	NH2	ARG	438	62.217	12.492	11.942	1.00	14.13	PROT
ATOM	1708	C	ARG	438	57.031	14.441	10.448	1.00	16.49	PROT
ATOM	1709	O	ARG	438	57.563	14.008	9.424	1.00	15.57	PROT
ATOM	1710	N	PHE	439	55.781	14.893	10.484	1.00	16.75	PROT
ATOM	1711	CA	PHE	439	54.933	14.878	9.303	1.00	21.63	PROT

ATOM	1712	CB	PHE	439	53.603	15.575	9.574	1.00	17.84	PROT
ATOM	1713	CG	PHE	439	52.597	15.364	8.490	1.00	20.60	PROT
ATOM	1714	CD1	PHE	439	52.042	14.103	8.279	1.00	30.60	PROT
ATOM	1715	CD2	PHE	439	52.265	16.394	7.622	1.00	14.95	PROT
ATOM	1716	CE1	PHE	439	51.175	13.867	7.206	1.00	29.12	PROT
ATOM	1717	CE2	PHE	439	51.404	16.173	6.552	1.00	25.18	PROT
ATOM	1718	CZ	PHE	439	50.860	14.905	6.341	1.00	27.82	PROT
ATOM	1719	C	PHE	439	55.620	15.548	8.130	1.00	28.17	PROT
ATOM	1720	O	PHE	439	55.512	15.095	6.987	1.00	28.83	PROT
ATOM	1721	N	LEU	440	56.328	16.633	8.427	1.00	26.77	PROT
ATOM	1722	CA	LEU	440	57.055	17.382	7.418	1.00	24.66	PROT
ATOM	1723	CB	LEU	440	57.555	18.696	8.005	1.00	10.80	PROT
ATOM	1724	CG	LEU	440	56.501	19.658	8.541	1.00	8.60	PROT
ATOM	1725	CD1	LEU	440	57.152	20.985	8.855	1.00	17.69	PROT
ATOM	1726	CD2	LEU	440	55.410	19.847	7.522	1.00	15.71	PROT
ATOM	1727	C	LEU	440	58.245	16.578	6.912	1.00	29.61	PROT
ATOM	1728	O	LEU	440	58.506	16.526	5.718	1.00	32.37	PROT
ATOM	1729	N	HIS	441	58.971	15.954	7.830	1.00	28.12	PROT
ATOM	1730	CA	HIS	441	60.140	15.172	7.460	1.00	28.51	PROT
ATOM	1731	CB	HIS	441	60.783	14.564	8.705	1.00	36.77	PROT
ATOM	1732	C	HIS	441	59.724	14.081	6.497	1.00	31.94	PROT
ATOM	1733	O	HIS	441	60.461	13.725	5.579	1.00	49.29	PROT
ATOM	1734	N	MET	442	58.533	13.545	6.711	1.00	41.16	PROT
ATOM	1735	CA	MET	442	58.033	12.487	5.854	1.00	39.99	PROT
ATOM	1736	CB	MET	442	56.871	11.776	6.551	1.00	38.32	PROT
ATOM	1737	CG	MET	442	57.263	11.122	7.860	1.00	19.20	PROT
ATOM	1738	SD	MET	442	55.859	10.350	8.675	1.00	38.06	PROT
ATOM	1739	CE	MET	442	54.906	11.767	9.073	1.00	21.45	PROT
ATOM	1740	C	MET	442	57.599	13.031	4.495	1.00	35.68	PROT
ATOM	1741	O	MET	442	57.887	12.431	3.461	1.00	27.43	PROT
ATOM	1742	N	LYS	443	56.920	14.175	4.503	1.00	34.17	PROT
ATOM	1743	CA	LYS	443	56.447	14.796	3.268	1.00	34.33	PROT
ATOM	1744	CB	LYS	443	55.767	16.129	3.574	1.00	21.68	PROT
ATOM	1745	CG	LYS	443	54.303	15.989	3.953	1.00	26.95	PROT
ATOM	1746	CD	LYS	443	53.497	17.231	3.602	1.00	30.78	PROT
ATOM	1747	CE	LYS	443	52.204	16.848	2.861	1.00	56.06	PROT
ATOM	1748	NZ	LYS	443	50.931	17.261	3.564	1.00	45.26	PROT
ATOM	1749	C	LYS	443	57.570	15.007	2.251	1.00	37.81	PROT
ATOM	1750	O	LYS	443	57.325	15.049	1.041	1.00	38.26	PROT
ATOM	1751	N	VAL	444	58.798	15.130	2.741	1.00	25.12	PROT
ATOM	1752	CA	VAL	444	59.942	15.318	1.867	1.00	25.43	PROT
ATOM	1753	CB	VAL	444	60.802	16.531	2.334	1.00	29.15	PROT
ATOM	1754	CG1	VAL	444	59.893	17.621	2.861	1.00	29.48	PROT
ATOM	1755	CG2	VAL	444	61.785	16.121	3.419	1.00	36.65	PROT
ATOM	1756	C	VAL	444	60.786	14.042	1.825	1.00	30.03	PROT
ATOM	1757	O	VAL	444	62.009	14.099	1.698	1.00	39.43	PROT

ATOM	1758	N	GLU	445	60.127	12.888	1.903	1.00	39.84	PROT
ATOM	1759	CA	GLU	445	60.842	11.612	1.896	1.00	43.07	PROT
ATOM	1760	CB	GLU	445	61.429	11.360	3.282	1.00	50.55	PROT
ATOM	1761	CG	GLU	445	62.399	10.203	3.351	1.00	77.00	PROT
ATOM	1762	CD	GLU	445	63.569	10.495	4.267	1.00	98.21	PROT
ATOM	1763	OE1	GLU	445	64.251	9.538	4.701	1.00	100.00	PROT
ATOM	1764	OE2	GLU	445	63.804	11.690	4.554	1.00	100.00	PROT
ATOM	1765	C	GLU	445	59.989	10.408	1.491	1.00	43.41	PROT
ATOM	1766	O	GLU	445	60.466	9.274	1.511	1.00	48.80	PROT
ATOM	1767	N	CYS	446	58.731	10.644	1.137	1.00	38.17	PROT
ATOM	1768	CA	CYS	446	57.852	9.548	0.743	1.00	41.38	PROT
ATOM	1769	CB	CYS	446	57.066	9.035	1.965	1.00	40.61	PROT
ATOM	1770	SG	CYS	446	58.062	8.276	3.320	1.00	44.73	PROT
ATOM	1771	C	CYS	446	56.886	10.003	-0.362	1.00	45.83	PROT
ATOM	1772	O	CYS	446	56.466	11.184	-0.323	1.00	44.17	PROT
ATOM	1773	OT	CYS	446	56.570	9.180	-1.259	1.00	40.79	PROT
ATOM	1774	CB	GLU	449	52.635	12.140	-2.649	1.00	28.60	PROT
ATOM	1775	C	GLU	449	52.019	10.014	-1.526	1.00	38.06	PROT
ATOM	1776	O	GLU	449	50.873	10.220	-1.935	1.00	43.52	PROT
ATOM	1777	N	GLU	449	54.378	10.460	-2.167	1.00	17.78	PROT
ATOM	1778	CA	GLU	449	53.105	11.069	-1.689	1.00	33.80	PROT
ATOM	1779	N	LEU	450	52.387	8.880	-0.936	1.00	46.88	PROT
ATOM	1780	CA	LEU	450	51.432	7.808	-0.696	1.00	52.62	PROT
ATOM	1781	CB	LEU	450	52.101	6.436	-0.850	1.00	57.50	PROT
ATOM	1782	CG	LEU	450	53.338	6.066	-0.028	1.00	59.81	PROT
ATOM	1783	CD1	LEU	450	53.613	4.573	-0.198	1.00	51.33	PROT
ATOM	1784	CD2	LEU	450	54.544	6.890	-0.473	1.00	57.03	PROT
ATOM	1785	C	LEU	450	50.850	7.970	0.711	1.00	50.65	PROT
ATOM	1786	O	LEU	450	50.965	7.091	1.569	1.00	38.49	PROT
ATOM	1787	N	PHE	451	50.225	9.123	0.923	1.00	32.24	PROT
ATOM	1788	CA	PHE	451	49.602	9.478	2.188	1.00	32.64	PROT
ATOM	1789	CB	PHE	451	50.091	10.857	2.648	1.00	56.06	PROT
ATOM	1790	CG	PHE	451	51.534	10.895	3.056	1.00	61.73	PROT
ATOM	1791	CD1	PHE	451	52.523	10.366	2.235	1.00	66.92	PROT
ATOM	1792	CD2	PHE	451	51.905	11.486	4.256	1.00	58.76	PROT
ATOM	1793	CE1	PHE	451	53.860	10.430	2.604	1.00	69.17	PROT
ATOM	1794	CE2	PHE	451	53.231	11.556	4.635	1.00	61.48	PROT
ATOM	1795	CZ	PHE	451	54.214	11.028	3.809	1.00	71.95	PROT
ATOM	1796	C	PHE	451	48.081	9.548	2.025	1.00	30.67	PROT
ATOM	1797	O	PHE	451	47.571	10.429	1.324	1.00	38.49	PROT
ATOM	1798	N	PRO	452	47.336	8.627	2.672	1.00	19.14	PROT
ATOM	1799	CD	PRO	452	47.774	7.495	3.510	1.00	24.21	PROT
ATOM	1800	CA	PRO	452	45.881	8.672	2.538	1.00	5.88	PROT
ATOM	1801	CB	PRO	452	45.397	7.742	3.633	1.00	16.92	PROT
ATOM	1802	CG	PRO	452	46.496	6.737	3.761	1.00	16.91	PROT
ATOM	1803	C	PRO	452	45.354	10.090	2.687	1.00	15.15	PROT

ATOM	1804	O	PRO	452	45.879	10.886	3.463	1.00	22.59	PROT
ATOM	1805	N	PRO	453	44.315	10.429	1.920	1.00	18.37	PROT
ATOM	1806	CD	PRO	453	43.653	9.540	0.951	1.00	3.83	PROT
ATOM	1807	CA	PRO	453	43.710	11.766	1.960	1.00	14.00	PROT
ATOM	1808	CB	PRO	453	42.502	11.649	1.032	1.00	20.04	PROT
ATOM	1809	CG	PRO	453	42.316	10.163	0.807	1.00	19.43	PROT
ATOM	1810	C	PRO	453	43.321	12.277	3.346	1.00	14.70	PROT
ATOM	1811	O	PRO	453	43.609	13.422	3.682	1.00	9.70	PROT
ATOM	1812	N	LEU	454	42.667	11.446	4.152	1.00	25.39	PROT
ATOM	1813	CA	LEU	454	42.261	11.886	5.491	1.00	28.61	PROT
ATOM	1814	CB	LEU	454	41.463	10.804	6.217	1.00	17.29	PROT
ATOM	1815	CG	LEU	454	40.893	11.224	7.572	1.00	9.05	PROT
ATOM	1816	CD1	LEU	454	40.174	12.547	7.435	1.00	17.23	PROT
ATOM	1817	CD2	LEU	454	39.946	10.148	8.079	1.00	8.05	PROT
ATOM	1818	C	LEU	454	43.479	12.234	6.316	1.00	23.36	PROT
ATOM	1819	O	LEU	454	43.484	13.225	7.037	1.00	10.99	PROT
ATOM	1820	N	PHE	455	44.503	11.394	6.205	1.00	14.26	PROT
ATOM	1821	CA	PHE	455	45.769	11.595	6.902	1.00	15.33	PROT
ATOM	1822	CB	PHE	455	46.761	10.496	6.501	1.00	26.32	PROT
ATOM	1823	CG	PHE	455	48.138	10.644	7.108	1.00	43.03	PROT
ATOM	1824	CD1	PHE	455	48.305	11.094	8.414	1.00	43.52	PROT
ATOM	1825	CD2	PHE	455	49.270	10.282	6.380	1.00	41.44	PROT
ATOM	1826	CE1	PHE	455	49.576	11.176	8.987	1.00	37.77	PROT
ATOM	1827	CE2	PHE	455	50.536	10.363	6.947	1.00	49.43	PROT
ATOM	1828	CZ	PHE	455	50.686	10.811	8.255	1.00	39.99	PROT
ATOM	1829	C	PHE	455	46.313	12.956	6.500	1.00	19.37	PROT
ATOM	1830	O	PHE	455	46.945	13.646	7.298	1.00	29.31	PROT
ATOM	1831	N	LEU	456	46.048	13.345	5.257	1.00	17.16	PROT
ATOM	1832	CA	LEU	456	46.527	14.625	4.750	1.00	20.15	PROT
ATOM	1833	CB	LEU	456	46.572	14.603	3.218	1.00	35.14	PROT
ATOM	1834	CG	LEU	456	47.593	13.660	2.568	1.00	40.45	PROT
ATOM	1835	CD1	LEU	456	47.233	13.456	1.116	1.00	44.38	PROT
ATOM	1836	CD2	LEU	456	48.990	14.234	2.680	1.00	34.88	PROT
ATOM	1837	C	LEU	456	45.680	15.800	5.226	1.00	20.37	PROT
ATOM	1838	O	LEU	456	46.207	16.866	5.548	1.00	29.61	PROT
ATOM	1839	N	GLU	457	44.367	15.607	5.280	1.00	13.06	PROT
ATOM	1840	CA	GLU	457	43.483	16.675	5.713	1.00	14.14	PROT
ATOM	1841	CB	GLU	457	42.037	16.256	5.516	1.00	29.57	PROT
ATOM	1842	C	GLU	457	43.731	17.058	7.173	1.00	14.95	PROT
ATOM	1843	O	GLU	457	43.771	18.237	7.514	1.00	15.98	PROT
ATOM	1844	N	VAL	458	43.901	16.051	8.026	1.00	26.34	PROT
ATOM	1845	CA	VAL	458	44.143	16.260	9.455	1.00	24.39	PROT
ATOM	1846	CB	VAL	458	44.219	14.910	10.208	1.00	20.14	PROT
ATOM	1847	CG1	VAL	458	44.882	15.102	11.554	1.00	22.01	PROT
ATOM	1848	CG2	VAL	458	42.831	14.341	10.400	1.00	28.11	PROT
ATOM	1849	C	VAL	458	45.417	17.039	9.778	1.00	21.50	PROT

ATOM	1850	O	VAL	458	45.364	18.062	10.439	1.00	18.85	PROT
ATOM	1851	N	PHE	459	46.557	16.546	9.308	1.00	16.05	PROT
ATOM	1852	CA	PHE	459	47.840	17.174	9.586	1.00	20.28	PROT
ATOM	1853	CB	PHE	459	48.862	16.072	9.846	1.00	20.26	PROT
ATOM	1854	CG	PHE	459	48.389	15.055	10.833	1.00	27.22	PROT
ATOM	1855	CD1	PHE	459	47.917	13.822	10.408	1.00	28.01	PROT
ATOM	1856	CD2	PHE	459	48.390	15.339	12.204	1.00	40.66	PROT
ATOM	1857	CE1	PHE	459	47.447	12.876	11.334	1.00	21.78	PROT
ATOM	1858	CE2	PHE	459	47.922	14.402	13.140	1.00	25.98	PROT
ATOM	1859	CZ	PHE	459	47.450	13.172	12.702	1.00	17.63	PROT
ATOM	1860	C	PHE	459	48.381	18.152	8.540	1.00	23.03	PROT
ATOM	1861	O	PHE	459	49.601	18.311	8.416	1.00	27.34	PROT
ATOM	1862	N	GLU	460	47.480	18.816	7.815	1.00	33.88	PROT
ATOM	1863	CA	GLU	460	47.846	19.774	6.767	1.00	36.60	PROT
ATOM	1864	CB	GLU	460	48.930	20.732	7.257	1.00	46.04	PROT
ATOM	1865	CG	GLU	460	48.406	21.899	8.054	1.00	67.27	PROT
ATOM	1866	CD	GLU	460	47.298	22.636	7.339	1.00	71.34	PROT
ATOM	1867	OE1	GLU	460	47.448	23.859	7.121	1.00	71.99	PROT
ATOM	1868	OE2	GLU	460	46.280	21.993	6.998	1.00	72.73	PROT
ATOM	1869	C	GLU	460	48.353	19.037	5.535	1.00	46.31	PROT
ATOM	1870	O	GLU	460	48.642	17.829	5.655	1.00	51.79	PROT
ATOM	1871	OT	GLU	460	48.461	19.669	4.462	1.00	60.92	PROT
ATOM	1872	C1	GC1	1	47.011	4.539	15.912	1.00	29.38	LIGA
ATOM	1873	C2	GC1	1	51.292	6.537	13.571	1.00	17.11	LIGA
ATOM	1874	C3	GC1	1	47.393	4.205	14.573	1.00	33.72	LIGA
ATOM	1875	C4	GC1	1	52.119	6.409	12.400	1.00	19.76	LIGA
ATOM	1876	C5	GC1	1	48.689	4.481	14.089	1.00	25.02	LIGA
ATOM	1877	C6	GC1	1	52.344	7.525	11.539	1.00	17.51	LIGA
ATOM	1878	C7	GC1	1	49.684	5.122	14.949	1.00	23.99	LIGA
ATOM	1879	C8	GC1	1	51.722	8.778	11.873	1.00	20.21	LIGA
ATOM	1880	C9	GC1	1	49.283	5.452	16.318	1.00	18.19	LIGA
ATOM	1881	C10	GC1	1	50.906	8.928	13.018	1.00	15.43	LIGA
ATOM	1882	C11	GC1	1	47.973	5.163	16.779	1.00	30.64	LIGA
ATOM	1883	C12	GC1	1	50.696	7.827	13.850	1.00	25.06	LIGA
ATOM	1884	O5	GC1	1	45.700	4.254	16.325	1.00	28.60	LIGA
ATOM	1885	C14	GC1	1	53.198	7.459	10.291	1.00	20.30	LIGA
ATOM	1886	C15	GC1	1	45.305	3.866	17.666	1.00	18.51	LIGA
ATOM	1887	C16	GC1	1	52.423	6.824	9.131	1.00	17.21	LIGA
ATOM	1888	C17	GC1	1	43.816	4.078	17.872	1.00	21.43	LIGA
ATOM	1889	C18	GC1	1	54.514	6.689	10.543	1.00	24.97	LIGA
ATOM	1890	C19	GC1	1	48.994	4.093	12.664	1.00	33.46	LIGA
ATOM	1891	C20	GC1	1	50.243	6.110	17.278	1.00	27.69	LIGA
ATOM	1892	O1	GC1	1	51.902	9.861	11.086	1.00	23.34	LIGA
ATOM	1893	C21	GC1	1	51.026	5.430	14.458	1.00	22.49	LIGA
ATOM	1894	O3	GC1	1	43.147	3.117	18.247	1.00	18.06	LIGA
ATOM	1895	O4	GC1	1	43.331	5.204	17.665	1.00	28.27	LIGA

END

APPENDIX 8

TRBGC1.PDB

REMARK TR-beta GC-2 Full length numbering
REMARK refinement resolution: 100.00 - 2.40 A starting r= 0.2602 free_r= 0.2960
REMARK   -   final   r= 0.2532 free_r= 0.2894
REMARK sg= P3(1)21 a= 68.9 b= 68.9 c= 131.5 alpha= 90 beta= 90 gamma= 120
REMARK theoretical total number of refl. in resol. range: 14710 (100.0 %)
REMARK number of unobserved reflections (no entry or |F|=0):   336 (2.3 %)
REMARK number of reflections rejected: 0 (0.0 %)
REMARK total number of reflections used: 14374 (97.7 %)
REMARK number of reflections in working set: 13656 (92.8 %)
REMARK number of reflections in test set: 718 (4.9 %)
REMARK
REMARK ALA 199 to ALA 201 from His-tag
REMARK
REMARK Four cacodylate-modified cysteines (CYA)
REMARK Cys294, Cys298, Cys388, Cys434
REMARK cacodylate modeled as single arsenic atom
REMARK
REMARK side chain of certain residues modeled as ALA due to poor density;
REMARK however, residue name reflects true residue for clarity
REMARK
REMARK amino acid sequence confirmed,
REMARK differing from that reported by Weinberger et. al.
REMARK in the following codons:
REMARK 243 Pro - Arg
REMARK 337 Ile - Thr
REMARK 451 Leu - Phe
REMARK as reported by Sakurai et. al.
REMARK note also correction of initiation codon,
REMARK yielding a polypeptide of 461 amino acids

JRNL AUTH A.SAKURAI,A.NAKAI,L.J.DEGROOT
JRNL TITL STRUCTURAL ANALYSIS OF HUMAN THYROID HORMONE RECEPTOR
JRNL TITL2 BETA GENE
JRNL REF MOL.CELL.ENDO.   V.71   1990
JRNL AUTH C.WEINBERGER, C.C.THOMPSON,R.LEBO,D.J.GRUOL,R.M.EVANS
JRNL TITL THE C-ERB-A GENE ENCODES A THYROID HORMONE RECEPTOR
JRNL REF   NATURE   V.324 6098 1986

ATOM   1 CB ALA   199   36.564 26.104 43.169 1.00 73.87
ATOM   2 C   ALA   199   34.723 26.996 44.613 1.00 78.22
ATOM   3 O   ALA   199   34.741 28.230 44.568 1.00 81.84
ATOM   4 N   ALA   199   34.389 26.744 42.166 1.00 77.76
ATOM   5 CA ALA   199   35.048 26.165 43.375 1.00 77.98

ATOM	6	N	ALA	200	34.428	26.309	45.713	1.00	77.78
ATOM	7	CA	ALA	200	34.098	26.961	46.984	1.00	77.03
ATOM	8	CB	ALA	200	32.761	27.693	46.865	1.00	79.04
ATOM	9	C	ALA	200	34.028	25.897	48.084	1.00	75.79
ATOM	10	O	ALA	200	34.877	25.857	48.978	1.00	71.58
ATOM	11	N	ALA	201	33.005	25.050	48.010	1.00	73.70
ATOM	12	CA	ALA	201	32.838	23.968	48.972	1.00	70.15
ATOM	13	CB	ALA	201	31.468	23.328	48.809	1.00	71.16
ATOM	14	C	ALA	201	33.934	22.963	48.642	1.00	67.54
ATOM	15	O	ALA	201	34.218	22.044	49.413	1.00	67.14
ATOM	16	N	GLU	202	34.540	23.164	47.476	1.00	62.05
ATOM	17	CA	GLU	202	35.624	22.325	46.975	1.00	59.45
ATOM	18	CB	GLU	202	35.835	22.621	45.482	1.00	55.12
ATOM	19	CG	GLU	202	36.820	21.716	44.749	1.00	56.25
ATOM	20	CD	GLU	202	36.382	20.260	44.723	1.00	54.99
ATOM	21	OE1	GLU	202	35.216	19.990	44.361	1.00	53.83
ATOM	22	OE2	GLU	202	37.210	19.385	45.050	1.00	59.90
ATOM	23	C	GLU	202	36.885	22.674	47.770	1.00	55.96
ATOM	24	O	GLU	202	37.472	21.823	48.435	1.00	52.90
ATOM	25	N	GLU	203	37.282	23.943	47.698	1.00	54.95
ATOM	26	CA	GLU	203	38.464	24.434	48.390	1.00	55.59
ATOM	27	CB	GLU	203	38.632	25.924	48.126	1.00	53.21
ATOM	28	C	GLU	203	38.415	24.171	49.894	1.00	56.30
ATOM	29	O	GLU	203	39.445	23.948	50.526	1.00	58.70
ATOM	30	N	LEU	204	37.213	24.193	50.462	1.00	57.14
ATOM	31	CA	LEU	204	37.038	23.966	51.893	1.00	56.93
ATOM	32	CB	LEU	204	35.658	24.465	52.338	1.00	58.31
ATOM	33	CG	LEU	204	35.348	24.508	53.839	1.00	51.69
ATOM	34	CD1	LEU	204	36.314	25.446	54.549	1.00	44.38
ATOM	35	CD2	LEU	204	33.920	24.986	54.039	1.00	52.44
ATOM	36	C	LEU	204	37.198	22.489	52.246	1.00	58.20
ATOM	37	O	LEU	204	37.831	22.155	53.252	1.00	58.99
ATOM	38	N	GLN	205	36.620	21.607	51.431	1.00	58.26
ATOM	39	CA	GLN	205	36.736	20.167	51.657	1.00	55.38
ATOM	40	CB	GLN	205	35.993	19.377	50.584	1.00	54.52
ATOM	41	CG	GLN	205	34.498	19.324	50.741	1.00	53.33
ATOM	42	CD	GLN	205	33.854	18.520	49.629	1.00	53.40
ATOM	43	OE1	GLN	205	33.850	18.939	48.473	1.00	51.68
ATOM	44	NE2	GLN	205	33.325	17.352	49.968	1.00	51.34
ATOM	45	C	GLN	205	38.200	19.775	51.608	1.00	55.05
ATOM	46	O	GLN	205	38.665	18.964	52.407	1.00	53.63
ATOM	47	N	LYS	206	38.918	20.348	50.648	1.00	53.55
ATOM	48	CA	LYS	206	40.337	20.078	50.493	1.00	57.40
ATOM	49	CB	LYS	206	40.896	20.814	49.269	1.00	58.94
ATOM	50	CG	LYS	206	40.300	20.375	47.941	1.00	67.73
ATOM	51	CD	LYS	206	40.921	21.141	46.781	1.00	72.50

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ATOM    52  CE  LYS  206    40.346  20.695  45.445  1.00 75.60
ATOM    53  NZ  LYS  206    40.945  21.445  44.304  1.00 77.08
ATOM    54  C   LYS  206    41.053  20.559  51.747  1.00 53.98
ATOM    55  O   LYS  206    41.905  19.866  52.300  1.00 53.49
ATOM    56  N   SER  207    40.680  21.757  52.184  1.00 53.61
ATOM    57  CA  SER  207    41.254  22.386  53.364  1.00 51.49
ATOM    58  CB  SER  207    40.546  23.715  53.619  1.00 51.01
ATOM    59  OG  SER  207    41.108  24.383  54.731  1.00 63.00
ATOM    60  C   SER  207    41.178  21.502  54.616  1.00 49.49
ATOM    61  O   SER  207    42.073  21.538  55.465  1.00 47.44
ATOM    62  N   ILE  208    40.117  20.707  54.725  1.00 44.39
ATOM    63  CA  ILE  208    39.938  19.829  55.874  1.00 45.99
ATOM    64  CB  ILE  208    38.421  19.627  56.174  1.00 44.50
ATOM    65  CG2 ILE  208    38.226  18.801  57.445  1.00 49.37
ATOM    66  CG1 ILE  208    37.766  20.993  56.385  1.00 42.73
ATOM    67  CD1 ILE  208    36.266  20.941  56.567  1.00 44.13
ATOM    68  C   ILE  208    40.614  18.477  55.643  1.00 47.80
ATOM    69  O   ILE  208    40.735  17.666  56.562  1.00 49.81
ATOM    70  N   GLY  209    41.059  18.238  54.412  1.00 51.31
ATOM    71  CA  GLY  209    41.728  16.983  54.107  1.00 46.85
ATOM    72  C   GLY  209    40.813  15.896  53.573  1.00 48.31
ATOM    73  O   GLY  209    41.203  14.730  53.485  1.00 47.75
ATOM    74  N   HIS  210    39.582  16.274  53.237  1.00 46.79
ATOM    75  CA  HIS  210    38.622  15.326  52.686  1.00 47.34
ATOM    76  CB  HIS  210    37.200  15.739  53.068  1.00 49.39
ATOM    77  C   HIS  210    38.796  15.350  51.162  1.00 45.47
ATOM    78  O   HIS  210    38.924  16.420  50.566  1.00 41.32
ATOM    79  N   LYS  211    38.829  14.176  50.545  1.00 45.76
ATOM    80  CA  LYS  211    38.991  14.095  49.090  1.00 43.42
ATOM    81  CB  LYS  211    39.892  12.910  48.715  1.00 46.72
ATOM    82  CG  LYS  211    41.210  12.815  49.497  1.00 56.48
ATOM    83  CD  LYS  211    42.068  14.089  49.486  1.00 60.93
ATOM    84  CE  LYS  211    42.562  14.496  48.103  1.00 61.95
ATOM    85  NZ  LYS  211    41.485  15.024  47.218  1.00 69.93
ATOM    86  C   LYS  211    37.609  13.917  48.473  1.00 35.68
ATOM    87  O   LYS  211    37.019  12.847  48.557  1.00 33.58
ATOM    88  N   PRO  212    37.077  14.972  47.828  1.00 35.64
ATOM    89  CD  PRO  212    37.654  16.304  47.584  1.00 38.60
ATOM    90  CA  PRO  212    35.748  14.896  47.211  1.00 38.35
ATOM    91  CB  PRO  212    35.537  16.318  46.682  1.00 38.95
ATOM    92  CG  PRO  212    36.409  17.156  47.604  1.00 42.00
ATOM    93  C   PRO  212    35.635  13.865  46.096  1.00 38.78
ATOM    94  O   PRO  212    36.546  13.714  45.280  1.00 34.64
ATOM    95  N   GLU  213    34.517  13.153  46.077  1.00 40.31
ATOM    96  CA  GLU  213    34.256  12.160  45.049  1.00 43.87
ATOM    97  CB  GLU  213    33.722  10.873  45.684  1.00 45.16
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ATOM	98	CG	GLU	213	34.616	10.344	46.800	1.00 47.60
ATOM	99	CD	GLU	213	34.404	8.870	47.088	1.00 50.68
ATOM	100	OE1	GLU	213	33.240	8.416	47.072	1.00 59.18
ATOM	101	OE2	GLU	213	35.402	8.167	47.353	1.00 49.06
ATOM	102	C	GLU	213	33.234	12.796	44.083	1.00 45.96
ATOM	103	O.	GLU	213	32.703	13.876	44.368	1.00 43.13
ATOM	104	N	PRO	214	32.953	12.154	42.933	1.00 46.52
ATOM	105	CD	PRO	214	33.459	10.884	42.391	1.00 46.44
ATOM	106	CA	PRO	214	31.995	12.737	41.982	1.00 47.52
ATOM	107	CB	PRO	214	32.040	11.750	40.813	1.00 45.40
ATOM	108	CG	PRO	214	33.445	11.181	40.913	1.00 49.89
ATOM	109	C	PRO	214	30.564	12.969	42.465	1.00 45.70
ATOM	110	O	PRO	214	29.972	12.112	43.121	1.00 44.49
ATOM	111	N	THR	215	30.013	14.136	42.129	1.00 45.24
ATOM	112	CA	THR	215	28.629	14.447	42.483	1.00 49.36
ATOM	113	CB	THR	215	28.312	15.949	42.330	1.00 44.86
ATOM	114	OG1	THR	215	28.253	16.285	40.942	1.00 52.26
ATOM	115	CG2	THR	215	29.387	16.793	42.992	1.00 39.43
ATOM	116	C	THR	215	27.791	13.673	41.464	1.00 52.51
ATOM	117	O	THR	215	28.326	13.192	40.465	1.00 53.48
ATOM	118	N	ASP	216	26.491	13.543	41.712	1.00 58.81
ATOM	119	CA	ASP	216	25.603	12.810	40.805	1.00 61.51
ATOM	120	CB	ASP	216	24.150	12.941	41.270	1.00 70.57
ATOM	121	CG	ASP	216	23.902	12.257	42.595	1.00 78.07
ATOM	122	OD1	ASP	216	24.042	11.018	42.660	1.00 82.31
ATOM	123	OD2	ASP	216	23.572	12.962	43.571	1.00 86.55
ATOM	124	C	ASP	216	25.706	13.277	39.356	1.00 58.42
ATOM	125	O	ASP	216	25.695	12.464	38.429	1.00 56.85
ATOM	126	N	GLU	217	25.798	14.587	39.167	1.00 54.92
ATOM	127	CA	GLU	217	25.905	15.156	37.833	1.00 53.37
ATOM	128	CB	GLU	217	25.861	16.682	37.906	1.00 51.02
ATOM	129	C	GLU	217	27.211	14.692	37.195	1.00 53.55
ATOM	130	O	GLU	217	27.239	14.301	36.027	1.00 54.33
ATOM	131	N	GLU	218	28.290	14.726	37.975	1.00 49.20
ATOM	132	CA	GLU	218	29.593	14.310	37.486	1.00 45.94
ATOM	133	CB	GLU	218	30.674	14.601	38.530	1.00 43.43
ATOM	134	CG	GLU	218	30.787	16.069	38.878	1.00 40.86
ATOM	135	CD	GLU	218	31.930	16.347	39.826	1.00 39.88
ATOM	136	OE1	GLU	218	32.000	15.667	40.875	1.00 37.61
ATOM	137	OE2	GLU	218	32.748	17.250	39.529	1.00 34.01
ATOM	138	C	GLU	218	29.624	12.838	37.101	1.00 44.71
ATOM	139	O	GLU	218	30.275	12.471	36.130	1.00 45.31
ATOM	140	N	TRP	219	28.935	11.991	37.863	1.00 44.02
ATOM	141	CA	TRP	219	28.892	10.572	37.539	1.00 46.97
ATOM	142	CB	TRP	219	28.183	9.762	38.630	1.00 48.42
ATOM	143	CG	TRP	219	29.034	9.473	39.823	1.00 54.61

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ATOM   144  CD2 TRP   219      30.167   8.572  39.879  1.00 55.24
ATOM   145  CE2 TRP   219      30.659   8.610  41.201  1.00 53.67
ATOM   146  CE3 TRP   219      30.795   7.745  38.938  1.00 54.55
ATOM   147  CD1 TRP   219      28.902  10.000  41.074  1.00 55.75
ATOM   148  NE1 TRP   219      29.868   9.491  41.912  1.00 54.43
ATOM   149  CZ2 TRP   219      31.771   7.846  41.622  1.00 52.54
ATOM   150  CZ3 TRP   219      31.912   6.975  39.353  1.00 55.17
ATOM   151  CH2 TRP   219      32.380   7.038  40.690  1.00 55.59
ATOM   152  C   TRP   219      28.167  10.356  36.216  1.00 47.32
ATOM   153  O   TRP   219      28.433   9.384  35.503  1.00 43.56
ATOM   154  N   GLU   220      27.247  11.259  35.898  1.00 49.91
ATOM   155  CA  GLU   220      26.497  11.155  34.655  1.00 53.57
ATOM   156  CB  GLU   220      25.274  12.075  34.694  1.00 58.18
ATOM   157  CG  GLU   220      24.323  11.876  33.526  1.00 73.13
ATOM   158  CD  GLU   220      23.082  12.742  33.630  1.00 80.06
ATOM   159  OE1 GLU   220      22.348  12.619  34.636  1.00 82.12
ATOM   160  OE2 GLU   220      22.839  13.545  32.701  1.00 82.78
ATOM   161  C   GLU   220      27.419  11.534  33.497  1.00 50.51
ATOM   162  O   GLU   220      27.399  10.899  32.443  1.00 49.94
ATOM   163  N   LEU   221      28.232  12.567  33.711  1.00 43.71
ATOM   164  CA  LEU   221      29.187  13.019  32.702  1.00 42.81
ATOM   165  CB  LEU   221      29.868  14.317  33.155  1.00 39.21
ATOM   166  CG  LEU   221      30.945  14.949  32.261  1.00 36.34
ATOM   167  CD1 LEU   221      30.339  15.351  30.922  1.00 36.93
ATOM   168  CD2 LEU   221      31.535  16.164  32.949  1.00 24.18
ATOM   169  C   LEU   221      30.234  11.928  32.505  1.00 43.46
ATOM   170  O   LEU   221      30.618  11.621  31.375  1.00 45.25
ATOM   171  N   ILE   222      30.683  11.342  33.614  1.00 39.09
ATOM   172  CA  ILE   222      31.677  10.273  33.586  1.00 35.47
ATOM   173  CB  ILE   222      32.031   9.811  35.037  1.00 33.74
ATOM   174  CG2 ILE   222      32.822   8.505  35.018  1.00 28.86
ATOM   175  CG1 ILE   222      32.813  10.918  35.745  1.00 33.33
ATOM   176  CD1 ILE   222      33.111  10.646  37.199  1.00 34.85
ATOM   177  C   ILE   222      31.139   9.098  32.781  1.00 34.26
ATOM   178  O   ILE   222      31.877   8.427  32.070  1.00 31.90
ATOM   179  N   LYS   223      29.840   8.860  32.908  1.00 39.49
ATOM   180  CA  LYS   223      29.168   7.775  32.210  1.00 44.43
ATOM   181  CB  LYS   223      27.696   7.733  32.635  1.00 50.81
ATOM   182  CG  LYS   223      26.845   6.693  31.929  1.00 62.51
ATOM   183  CD  LYS   223      25.379   6.856  32.313  1.00 72.22
ATOM   184  CE  LYS   223      24.487   5.855  31.591  1.00 74.55
ATOM   185  NZ  LYS   223      23.045   6.057  31.925  1.00 75.78
ATOM   186  C   LYS   223      29.266   7.983  30.691  1.00 42.81
ATOM   187  O   LYS   223      29.640   7.078  29.946  1.00 40.36
ATOM   188  N   THR   224      28.924   9.194  30.257  1.00 39.89
ATOM   189  CA  THR   224      28.948   9.566  28.850  1.00 39.93
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ATOM    190  CB  THR  224    28.466  11.021  28.680  1.00 40.57
ATOM    191  OG1 THR  224    27.135  11.134  29.197  1.00 39.27
ATOM    192  CG2 THR  224    28.480  11.437  27.214  1.00 38.11
ATOM    193  C   THR  224    30.333   9.433  28.234  1.00 39.96
ATOM    194  O   THR  224    30.515   8.714  27.248  1.00 36.67
ATOM    195  N.  VAL  225    31.303  10.123  28.833  1.00 38.02
ATOM    196  CA  VAL  225    32.680  10.117  28.355  1.00 38.12
ATOM    197  CB  VAL  225    33.565  11.014  29.243  1.00 38.19
ATOM    198  CG1 VAL  225    34.960  11.162  28.632  1.00 36.77
ATOM    199  CG2 VAL  225    32.910  12.361  29.406  1.00 41.76
ATOM    200  C   VAL  225    33.291   8.724  28.302  1.00 37.52
ATOM    201  O   VAL  225    34.022   8.395  27.364  1.00 36.77
ATOM    202  N   THR  226    33.002   7.904  29.310  1.00 34.02
ATOM    203  CA  THR  226    33.542   6.552  29.350  1.00 34.67
ATOM    204  CB  THR  226    33.237   5.857  30.707  1.00 30.56
ATOM    205  OG1 THR  226    33.858   6.598  31.768  1.00 32.20
ATOM    206  CG2 THR  226    33.775   4.437  30.722  1.00 20.99
ATOM    207  C   THR  226    32.960   5.722  28.211  1.00 36.41
ATOM    208  O   THR  226    33.698   5.075  27.472  1.00 39.64
ATOM    209  N   GLU  227    31.636   5.758  28.073  1.00 39.20
ATOM    210  CA  GLU  227    30.935   5.020  27.027  1.00 36.93
ATOM    211  CB  GLU  227    29.434   5.296  27.111  1.00 38.06
ATOM    212  C   GLU  227    31.466   5.409  25.651  1.00 37.69
ATOM    213  O   GLU  227    31.713   4.544  24.805  1.00 40.94
ATOM    214  N   ALA  228    31.641   6.709  25.439  1.00 32.86
ATOM    215  CA  ALA  228    32.156   7.236  24.177  1.00 32.48
ATOM    216  CB  ALA  228    32.285   8.746  24.256  1.00 28.25
ATOM    217  C   ALA  228    33.508   6.612  23.861  1.00 36.12
ATOM    218  O   ALA  228    33.736   6.135  22.747  1.00 37.86
ATOM    219  N   HIS  229    34.404   6.611  24.843  1.00 33.58
ATOM    220  CA  HIS  229    35.724   6.029  24.669  1.00 32.97
ATOM    221  CB  HIS  229    36.579   6.263  25.921  1.00 33.69
ATOM    222  CG  HIS  229    37.857   5.489  25.934  1.00 28.39
ATOM    223  CD2 HIS  229    38.338   4.576  26.811  1.00 28.83
ATOM    224  ND1 HIS  229    38.804   5.593  24.937  1.00 30.47
ATOM    225  CE1 HIS  229    39.812   4.779  25.193  1.00 26.95
ATOM    226  NE2 HIS  229    39.556   4.147  26.332  1.00 31.27
ATOM    227  C   HIS  229    35.653   4.536  24.371  1.00 38.40
ATOM    228  O   HIS  229    36.227   4.071  23.383  1.00 41.49
ATOM    229  N   VAL  230    34.951   3.786  25.216  1.00 38.55
ATOM    230  CA  VAL  230    34.823   2.339  25.049  1.00 40.40
ATOM    231  CB  VAL  230    33.964   1.726  26.196  1.00 44.68
ATOM    232  CG1 VAL  230    33.865   0.208  26.041  1.00 39.39
ATOM    233  CG2 VAL  230    34.576   2.075  27.540  1.00 42.18
ATOM    234  C   VAL  230    34.219   1.934  23.700  1.00 44.28
ATOM    235  O   VAL  230    34.640   0.948  23.092  1.00 45.94
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ATOM    236  N   ALA   231     33.236   2.698  23.230  1.00 45.59
ATOM    237  CA  ALA   231     32.580   2.403  21.961  1.00 47.84
ATOM    238  CB  ALA   231     31.297   3.227  21.832  1.00 45.08
ATOM    239  C   ALA   231     33.487   2.666  20.761  1.00 48.04
ATOM    240  O   ALA   231     33.364   2.012  19.727  1.00 49.95
ATOM    241  N-  THR   232     34.403   3.619  20.907  1.00 47.26
ATOM    242  CA  THR   232     35.312   3.973  19.824  1.00 43.64
ATOM    243  CB  THR   232     35.379   5.502  19.629  1.00 41.93
ATOM    244  OG1 THR   232     35.945   6.117  20.797  1.00 39.10
ATOM    245  CG2 THR   232     33.985   6.065  19.382  1.00 29.80
ATOM    246  C   THR   232     36.720   3.458  20.046  1.00 43.97
ATOM    247  O   THR   232     37.629   3.791  19.292  1.00 40.55
ATOM    248  N   ASN   233     36.905   2.648  21.081  1.00 48.62
ATOM    249  CA  ASN   233     38.218   2.101  21.368  1.00 58.62
ATOM    250  CB  ASN   233     38.473   2.092  22.876  1.00 62.44
ATOM    251  CG  ASN   233     39.909   1.765  23.223  1.00 68.35
ATOM    252  OD1 ASN   233     40.843   2.401  22.724  1.00 65.50
ATOM    253  ND2 ASN   233     40.098   0.776  24.090  1.00 74.29
ATOM    254  C   ASN   233     38.282   0.690  20.802  1.00 65.06
ATOM    255  O   ASN   233     37.748  -0.257  21.382  1.00 69.47
ATOM    256  N   ALA   234     38.934   0.577  19.645  1.00 68.80
ATOM    257  CA  ALA   234     39.098  -0.672  18.909  1.00 70.98
ATOM    258  CB  ALA   234     40.215  -0.508  17.886  1.00 71.43
ATOM    259  C   ALA   234     39.353  -1.919  19.753  1.00 73.83
ATOM    260  O   ALA   234     40.193  -1.911  20.652  1.00 74.33
ATOM    261  N   GLN   235     38.615  -2.983  19.434  1.00 75.07
ATOM    262  CA  GLN   235     38.720  -4.281  20.103  1.00 76.32
ATOM    263  CB  GLN   235     40.130  -4.856  19.912  1.00 76.98
ATOM    264  CG  GLN   235     40.429  -5.417  18.516  1.00 77.07
ATOM    265  CD  GLN   235     40.142  -4.444  17.377  1.00 80.85
ATOM    266  OE1 GLN   235     38.985  -4.144  17.072  1.00 82.01
ATOM    267  NE2 GLN   235     41.201  -3.949  16.742  1.00 78.80
ATOM    268  C   GLN   235     38.351  -4.293  21.586  1.00 77.15
ATOM    269  O   GLN   235     38.217  -5.361  22.190  1.00 76.06
ATOM    270  N   GLY   236     38.188  -3.103  22.161  1.00 77.46
ATOM    271  CA  GLY   236     37.818  -2.974  23.562  1.00 78.37
ATOM    272  C   GLY   236     38.620  -3.783  24.566  1.00 79.43
ATOM    273  O   GLY   236     39.826  -3.575  24.736  1.00 79.47
ATOM    274  N   SER   237     37.937  -4.711  25.234  1.00 77.98
ATOM    275  CA  SER   237     38.544  -5.561  26.253  1.00 76.49
ATOM    276  CB  SER   237     37.475  -6.462  26.874  1.00 76.46
ATOM    277  C   SER   237     39.712  -6.412  25.765  1.00 75.35
ATOM    278  O   SER   237     40.858  -6.181  26.152  1.00 75.47
ATOM    279  N   HIS   238     39.421  -7.397  24.922  1.00 75.56
ATOM    280  CA  HIS   238     40.451  -8.294  24.409  1.00 75.46
ATOM    281  CB  HIS   238     39.837  -9.654  24.076  1.00 75.85
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ATOM    282  C   HIS   238      41.185  -7.751  23.191  1.00 74.10
ATOM    283  O   HIS   238      40.610  -7.638  22.109  1.00 75.34
ATOM    284  N   TRP   239      42.459  -7.417  23.381  1.00 73.39
ATOM    285  CA  TRP   239      43.300  -6.907  22.302  1.00 74.02
ATOM    286  CB  TRP   239      43.556  -5.402  22.460  1.00 81.77
ATOM    287  CG  TRP   239      44.190  -5.023  23.761  1.00 89.67
ATOM    288  CD2 TRP   239      45.597  -4.797  24.008  1.00 93.19
ATOM    289  CE2 TRP   239      45.744  -4.527  25.384  1.00 95.46
ATOM    290  CE3 TRP   239      46.732  -4.793  23.186  1.00 95.35
ATOM    291  CD1 TRP   239      43.566  -4.888  24.972  1.00 94.16
ATOM    292  NE1 TRP   239      44.483  -4.591  25.954  1.00 97.48
ATOM    293  CZ2 TRP   239      46.993  -4.262  25.981  1.00 96.23
ATOM    294  CZ3 TRP   239      47.992  -4.528  23.778  1.00 96.75
ATOM    295  CH2 TRP   239      48.101  -4.262  25.164  1.00 97.32
ATOM    296  C   TRP   239      44.633  -7.649  22.283  1.00 70.77
ATOM    297  O   TRP   239      45.339  -7.644  21.274  1.00 71.70
ATOM    298  N   LYS   240      44.978  -8.276  23.405  1.00 67.10
ATOM    299  CA  LYS   240      46.219  -9.040  23.519  1.00 65.63
ATOM    300  CB  LYS   240      46.387  -9.569  24.946  1.00 66.65
ATOM    301  CG  LYS   240      46.379  -8.504  26.030  1.00 69.83
ATOM    302  CD  LYS   240      47.664  -7.691  26.069  1.00 71.49
ATOM    303  CE  LYS   240      48.839  -8.515  26.573  1.00 71.31
ATOM    304  NZ  LYS   240      50.071  -7.684  26.691  1.00 72.23
ATOM    305  C   LYS   240      46.143 -10.222  22.555  1.00 66.19
ATOM    306  O   LYS   240      47.075 -10.493  21.797  1.00 65.20
ATOM    307  N   ASN   241      45.010 -10.923  22.598  1.00 66.69
ATOM    308  CA  ASN   241      44.773 -12.089  21.750  1.00 67.53
ATOM    309  CB  ASN   241      43.503 -12.813  22.213  1.00 67.98
ATOM    310  CG  ASN   241      43.504 -13.096  23.704  1.00 70.19
ATOM    311  OD1 ASN   241      44.410 -13.744  24.227  1.00 71.37
ATOM    312  ND2 ASN   241      42.483 -12.605  24.400  1.00 71.48
ATOM    313  C   ASN   241      44.621 -11.681  20.286  1.00 66.62
ATOM    314  O   ASN   241      44.882 -12.475  19.382  1.00 64.76
ATOM    315  N   LYS   242      44.196 -10.436  20.070  1.00 66.86
ATOM    316  CA  LYS   242      43.989  -9.882  18.732  1.00 67.46
ATOM    317  CB  LYS   242      42.982  -8.731  18.799  1.00 67.93
ATOM    318  CG  LYS   242      41.601  -9.138  19.279  1.00 71.52
ATOM    319  CD  LYS   242      40.876  -9.986  18.246  1.00 74.32
ATOM    320  CE  LYS   242      40.449  -9.160  17.043  1.00 74.41
ATOM    321  NZ  LYS   242      39.455  -8.120  17.436  1.00 74.44
ATOM    322  C   LYS   242      45.281  -9.367  18.097  1.00 66.28
ATOM    323  O   LYS   242      45.414  -9.334  16.874  1.00 67.61
ATOM    324  N   ARG   243      46.225  -8.961  18.938  1.00 64.19
ATOM    325  CA  ARG   243      47.497  -8.422  18.478  1.00 62.43
ATOM    326  CB  ARG   243      48.376  -8.070  19.685  1.00 60.12
ATOM    327  C   ARG   243      48.261  -9.348  17.538  1.00 62.97
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ATOM	328	O	ARG	243	48.585	-10.484	17.891	1.00	63.96
ATOM	329	N	LYS	244	48.531	-8.853	16.334	1.00	62.41
ATOM	330	CA	LYS	244	49.303	-9.593	15.339	1.00	61.57
ATOM	331	CB	LYS	244	48.601	-9.607	13.972	1.00	63.68
ATOM	332	CG	LYS	244	47.210	-10.231	13.970	1.00	71.29
ATOM	333	CD	LYS	244	46.666	-10.441	12.549	1.00	73.83
ATOM	334	CE	LYS	244	46.505	-9.139	11.767	1.00	74.71
ATOM	335	NZ	LYS	244	45.542	-8.199	12.407	1.00	73.32
ATOM	336	C	LYS	244	50.613	-8.824	15.223	1.00	59.30
ATOM	337	O	LYS	244	50.637	-7.716	14.686	1.00	56.34
ATOM	338	N	PHE	245	51.690	-9.405	15.744	1.00	57.06
ATOM	339	CA	PHE	245	52.996	-8.757	15.704	1.00	59.01
ATOM	340	CB	PHE	245	54.034	-9.588	16.467	1.00	59.62
ATOM	341	CG	PHE	245	53.704	-9.783	17.934	1.00	66.60
ATOM	342	CD1	PHE	245	52.656	-10.626	18.329	1.00	67.17
ATOM	343	CD2	PHE	245	54.427	-9.096	18.918	1.00	69.25
ATOM	344	CE1	PHE	245	52.320	-10.789	19.699	1.00	69.92
ATOM	345	CE2	PHE	245	54.111	-9.240	20.294	1.00	70.50
ATOM	346	CZ	PHE	245	53.051	-10.091	20.686	1.00	70.89
ATOM	347	C	PHE	245	53.463	-8.537	14.272	1.00	60.68
ATOM	348	O	PHE	245	53.433	-9.455	13.447	1.00	62.37
ATOM	349	N	LEU	246	53.880	-7.311	13.976	1.00	60.10
ATOM	350	CA	LEU	246	54.359	-6.968	12.642	1.00	59.44
ATOM	351	CB	LEU	246	54.654	-5.464	12.560	1.00	57.43
ATOM	352	CG	LEU	246	54.937	-4.851	11.183	1.00	54.41
ATOM	353	CD1	LEU	246	53.681	-4.931	10.320	1.00	52.43
ATOM	354	CD2	LEU	246	55.358	-3.398	11.343	1.00	51.69
ATOM	355	C	LEU	246	55.638	-7.772	12.425	1.00	62.05
ATOM	356	O	LEU	246	56.447	-7.923	13.346	1.00	59.85
ATOM	357	N	PRO	247	55.836	-8.312	11.203	1.00	63.33
ATOM	358	CD	PRO	247	54.990	-8.230	10.001	1.00	64.44
ATOM	359	CA	PRO	247	57.036	-9.102	10.910	1.00	63.56
ATOM	360	CB	PRO	247	56.917	-9.327	9.404	1.00	64.42
ATOM	361	CG	PRO	247	55.413	-9.481	9.251	1.00	64.90
ATOM	362	C	PRO	247	58.342	-8.431	11.325	1.00	61.94
ATOM	363	O	PRO	247	58.581	-7.256	11.053	1.00	61.60
ATOM	364	N	ALA	248	59.180	-9.219	11.990	1.00	61.33
ATOM	365	CA	ALA	248	60.468	-8.785	12.511	1.00	63.50
ATOM	366	CB	ALA	248	61.151	-9.991	13.174	1.00	66.94
ATOM	370	C	ALA	248	61.412	-8.140	11.489	1.00	64.19
ATOM	371	O	ALA	248	62.449	-7.593	11.867	1.00	65.56
ATOM	372	N	ASP	249	61.055	-8.188	10.207	1.00	64.36
ATOM	373	CA	ASP	249	61.900	-7.610	9.163	1.00	63.33
ATOM	374	CB	ASP	249	62.104	-8.618	8.026	1.00	62.97
ATOM	375	CG	ASP	249	60.798	-9.051	7.395	1.00	64.63
ATOM	376	OD1	ASP	249	60.037	-9.803	8.043	1.00	64.84

ATOM	377	OD2	ASP	249	60.526	-8.626	6.253	1.00	66.52
ATOM	378	C	ASP	249	61.388	-6.293	8.572	1.00	64.31
ATOM	379	O	ASP	249	62.112	-5.624	7.830	1.00	64.73
ATOM	380	N	ILE	250	60.148	-5.927	8.885	1.00	63.09
ATOM	381	CA	ILE	250	59.577	-4.676	8.385	1.00	64.39
ATOM	382	CB	ILE	250	58.035	-4.741	8.349	1.00	65.79
ATOM	383	CG2	ILE	250	57.463	-3.408	7.861	1.00	64.78
ATOM	384	CG1	ILE	250	57.594	-5.893	7.439	1.00	65.28
ATOM	385	CD1	ILE	250	56.094	-6.103	7.362	1.00	65.08
ATOM	386	C	ILE	250	60.015	-3.534	9.299	1.00	65.21
ATOM	387	O	ILE	250	60.002	-3.676	10.524	1.00	64.05
ATOM	388	N	GLY	251	60.401	-2.405	8.700	1.00	65.48
ATOM	389	CA	GLY	251	60.864	-1.263	9.472	1.00	67.32
ATOM	390	C	GLY	251	62.069	-1.711	10.271	1.00	68.52
ATOM	391	O	GLY	251	62.099	-1.610	11.497	1.00	65.49
ATOM	392	N	GLN	252	63.080	-2.194	9.555	1.00	72.26
ATOM	393	CA	GLN	252	64.277	-2.726	10.176	1.00	74.10
ATOM	394	CB	GLN	252	64.598	-4.068	9.515	1.00	75.82
ATOM	395	CG	GLN	252	65.518	-4.974	10.302	1.00	77.81
ATOM	396	CD	GLN	252	65.686	-6.319	9.630	1.00	79.38
ATOM	397	OE1	GLN	252	66.087	-6.397	8.468	1.00	80.55
ATOM	398	NE2	GLN	252	65.384	-7.391	10.357	1.00	78.12
ATOM	399	C	GLN	252	65.496	-1.817	10.138	1.00	77.17
ATOM	400	O	GLN	252	65.553	-0.826	9.399	1.00	76.50
ATOM	401	N	ALA	253	66.470	-2.187	10.966	1.00	80.78
ATOM	402	CA	ALA	253	67.729	-1.475	11.104	1.00	83.70
ATOM	403	CB	ALA	253	68.402	-1.903	12.401	1.00	83.23
ATOM	404	C	ALA	253	68.639	-1.774	9.913	1.00	85.59
ATOM	405	O	ALA	253	68.294	-2.673	9.117	1.00	85.69
ATOM	406	OXT	ALA	253	69.694	-1.115	9.802	1.00	88.37
ATOM	429	CB	LYS	263	65.708	7.766	4.514	1.00	63.50
ATOM	430	C	LYS	263	64.141	6.903	6.272	1.00	63.41
ATOM	431	O	LYS	263	64.442	5.776	6.673	1.00	61.93
ATOM	432	N	LYS	263	66.368	7.841	6.894	1.00	61.71
ATOM	433	CA	LYS	263	65.218	7.942	5.950	1.00	64.36
ATOM	434	N	VAL	264	62.886	7.305	6.090	1.00	61.15
ATOM	435	CA	VAL	264	61.724	6.462	6.351	1.00	59.46
ATOM	436	CB	VAL	264	60.429	7.221	5.962	1.00	59.03
ATOM	437	CG1	VAL	264	59.200	6.421	6.363	1.00	53.79
ATOM	438	CG2	VAL	264	60.422	8.593	6.623	1.00	55.32
ATOM	439	C	VAL	264	61.790	5.129	5.595	1.00	60.96
ATOM	440	O	VAL	264	62.071	5.098	4.395	1.00	62.13
ATOM	441	N	ASP	265	61.522	4.034	6.304	1.00	62.59
ATOM	442	CA	ASP	265	61.562	2.693	5.727	1.00	64.95
ATOM	443	CB	ASP	265	61.322	1.644	6.810	1.00	64.32
ATOM	444	CG	ASP	265	61.415	0.232	6.277	1.00	67.70

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ATOM    445  OD1 ASP  265       62.514  -0.158   5.831  1.00 72.59
ATOM    446  OD2 ASP  265       60.393  -0.486   6.289  1.00 68.84
ATOM    447  C   ASP  265       60.560   2.470   4.591  1.00 65.64
ATOM    448  O   ASP  265       60.789   1.637   3.717  1.00 68.81
ATOM    449  N   LEU  266       59.456   3.211   4.624  1.00 65.12
ATOM    450  CA  LEU  266       58.394   3.138   3.615  1.00 63.40
ATOM    451  CB  LEU  266       58.963   3.333   2.202  1.00 67.34
ATOM    452  CG  LEU  266       59.665   4.662   1.894  1.00 69.35
ATOM    453  CD1 LEU  266       60.193   4.627   0.469  1.00 68.24
ATOM    454  CD2 LEU  266       58.705   5.831   2.075  1.00 70.47
ATOM    455  C   LEU  266       57.562   1.854   3.658  1.00 59.67
ATOM    456  O   LEU  266       56.342   1.903   3.486  1.00 53.35
ATOM    457  N   GLU  267       58.205   0.713   3.872  1.00 58.01
ATOM    458  CA  GLU  267       57.454  -0.535   3.945  1.00 58.34
ATOM    459  CB  GLU  267       58.387  -1.750   3.921  1.00 59.21
ATOM    460  CG  GLU  267       57.640  -3.072   4.053  1.00 62.89
ATOM    461  CD  GLU  267       58.548  -4.285   3.979  1.00 67.66
ATOM    462  OE1 GLU  267       59.513  -4.371   4.771  1.00 69.95
ATOM    463  OE2 GLU  267       58.285  -5.162   3.129  1.00 69.40
ATOM    464  C   GLU  267       56.666  -0.515   5.243  1.00 57.67
ATOM    465  O   GLU  267       55.488  -0.877   5.276  1.00 58.34
ATOM    466  N   ALA  268       57.327  -0.077   6.317  1.00 53.43
ATOM    467  CA  ALA  268       56.701   0.013   7.629  1.00 49.00
ATOM    468  CB  ALA  268       57.766   0.244   8.695  1.00 45.72
ATOM    469  C   ALA  268       55.701   1.166   7.611  1.00 45.76
ATOM    470  O   ALA  268       54.598   1.057   8.144  1.00 41.50
ATOM    471  N   PHE  269       56.106   2.267   6.983  1.00 41.43
ATOM    472  CA  PHE  269       55.277   3.457   6.855  1.00 43.96
ATOM    473  CB  PHE  269       56.016   4.511   6.022  1.00 40.10
ATOM    474  CG  PHE  269       55.264   5.818   5.859  1.00 40.44
ATOM    475  CD1 PHE  269       55.102   6.690   6.949  1.00 38.98
ATOM    476  CD2 PHE  269       54.706   6.170   4.626  1.00 37.15
ATOM    477  CE1 PHE  269       54.401   7.920   6.807  1.00 32.12
ATOM    478  CE2 PHE  269       53.999   7.389   4.457  1.00 38.41
ATOM    479  CZ  PHE  269       53.843   8.269   5.554  1.00 40.55
ATOM    480  C   PHE  269       53.976   3.081   6.151  1.00 49.76
ATOM    481  O   PHE  269       52.903   3.622   6.443  1.00 52.15
ATOM    482  N   SER  270       54.089   2.140   5.217  1.00 53.15
ATOM    483  CA  SER  270       52.957   1.669   4.432  1.00 52.29
ATOM    484  CB  SER  270       53.456   0.703   3.349  1.00 51.85
ATOM    485  OG  SER  270       52.400   0.297   2.499  1.00 53.42
ATOM    486  C   SER  270       51.901   0.992   5.303  1.00 49.38
ATOM    487  O   SER  270       50.713   1.284   5.185  1.00 48.74
ATOM    488  N   HIS  271       52.335   0.085   6.173  1.00 50.15
ATOM    489  CA  HIS  271       51.410  -0.614   7.061  1.00 51.67
ATOM    490  CB  HIS  271       52.150  -1.682   7.878  1.00 58.52
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ATOM   491  CG  HIS  271    52.697  -2.808   7.059  1.00 68.97
ATOM   492  CD2 HIS  271    52.425  -4.131   7.063  1.00 70.88
ATOM   493  ND1 HIS  271    53.660  -2.621   6.080  1.00 71.98
ATOM   494  CE1 HIS  271    53.951  -3.782   5.528  1.00 73.91
ATOM   495  NE2 HIS  271    53.214  -4.720   6.104  1.00 73.59
ATOM   496  C - HIS  271    50.711   0.365   8.008  1.00 48.33
ATOM   497  O   HIS  271    49.507   0.260   8.240  1.00 48.39
ATOM   498  N   PHE  272    51.472   1.321   8.537  1.00 41.34
ATOM   499  CA  PHE  272    50.946   2.316   9.462  1.00 39.44
ATOM   500  CB  PHE  272    52.076   3.215   9.976  1.00 36.67
ATOM   501  CG  PHE  272    53.167   2.475  10.749  1.00 33.39
ATOM   502  CD1 PHE  272    54.421   3.065  10.915  1.00 33.14
ATOM   503  CD2 PHE  272    52.934   1.216  11.311  1.00 38.28
ATOM   504  CE1 PHE  272    55.454   2.418  11.633  1.00 38.26
ATOM   505  CE2 PHE  272    53.961   0.538  12.047  1.00 43.28
ATOM   506  CZ  PHE  272    55.225   1.146  12.207  1.00 39.74
ATOM   507  C   PHE  272    49.857   3.183   8.822  1.00 40.75
ATOM   508  O   PHE  272    48.784   3.361   9.394  1.00 35.51
ATOM   509  N   THR  273    50.136   3.714   7.635  1.00 41.64
ATOM   510  CA  THR  273    49.170   4.561   6.938  1.00 45.97
ATOM   511  CB  THR  273    49.813   5.249   5.711  1.00 51.52
ATOM   512  OG1 THR  273    50.339   4.257   4.815  1.00 45.74
ATOM   513  CG2 THR  273    50.936   6.179   6.158  1.00 49.73
ATOM   514  C   THR  273    47.941   3.772   6.481  1.00 46.23
ATOM   515  O   THR  273    46.879   4.344   6.233  1.00 41.21
ATOM   516  N   LYS  274    48.090   2.455   6.380  1.00 46.21
ATOM   517  CA  LYS  274    46.984   1.608   5.955  1.00 54.53
ATOM   518  CB  LYS  274    47.482   0.180   5.708  1.00 54.36
ATOM   519  C   LYS  274    45.878   1.595   7.006  1.00 56.88
ATOM   520  O   LYS  274    44.695   1.486   6.675  1.00 57.98
ATOM   521  N   ILE  275    46.267   1.718   8.268  1.00 56.48
ATOM   522  CA  ILE  275    45.312   1.695   9.368  1.00 52.64
ATOM   523  CB  ILE  275    45.710   0.611  10.391  1.00 49.15
ATOM   524  CG2 ILE  275    45.719  -0.758   9.701  1.00 47.42
ATOM   525  CG1 ILE  275    47.101   0.921  10.971  1.00 45.31
ATOM   526  CD1 ILE  275    47.565  -0.050  12.053  1.00 37.22
ATOM   527  C   ILE  275    45.175   3.032  10.086  1.00 51.78
ATOM   528  O   ILE  275    44.578   3.108  11.159  1.00 49.80
ATOM   529  N   ILE  276    45.710   4.088   9.481  1.00 51.76
ATOM   530  CA  ILE  276    45.657   5.416  10.084  1.00 52.58
ATOM   531  CB  ILE  276    46.733   6.364   9.464  1.00 55.04
ATOM   532  CG2 ILE  276    46.395   6.696   8.020  1.00 53.28
ATOM   533  CG1 ILE  276    46.823   7.663  10.270  1.00 57.31
ATOM   534  CD1 ILE  276    47.364   7.485  11.664  1.00 60.32
ATOM   535  C   ILE  276    44.279   6.073   9.974  1.00 50.70
ATOM   536  O   ILE  276    43.858   6.775  10.895  1.00 55.55
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ATOM    537  N   THR   277      43.576   5.849   8.866  1.00 47.33
ATOM    538  CA  THR   277      42.255   6.450   8.681  1.00 42.59
ATOM    539  CB  THR   277      41.695   6.190   7.254  1.00 44.97
ATOM    540  OG1 THR   277      42.611   6.702   6.280  1.00 46.38
ATOM    541  CG2 THR   277      40.349   6.892   7.065  1.00 37.17
ATOM    542  C-  THR   277      41.252   5.954   9.718  1.00 39.84
ATOM    543  O   THR   277      40.570   6.759  10.351  1.00 40.55
ATOM    544  N   PRO   278      41.126   4.620   9.899  1.00 38.20
ATOM    545  CD  PRO   278      41.746   3.457   9.242  1.00 36.34
ATOM    546  CA  PRO   278      40.165   4.167  10.907  1.00 36.63
ATOM    547  CB  PRO   278      40.242   2.639  10.783  1.00 32.95
ATOM    548  CG  PRO   278      41.668   2.419  10.343  1.00 35.75
ATOM    549  C   PRO   278      40.532   4.681  12.306  1.00 38.60
ATOM    550  O   PRO   278      39.653   5.017  13.104  1.00 37.67
ATOM    551  N   ALA   279      41.831   4.758  12.586  1.00 37.05
ATOM    552  CA  ALA   279      42.315   5.248  13.877  1.00 33.18
ATOM    553  CB  ALA   279      43.836   5.135  13.949  1.00 30.56
ATOM    554  C   ALA   279      41.890   6.692  14.077  1.00 33.47
ATOM    555  O   ALA   279      41.403   7.060  15.151  1.00 33.74
ATOM    556  N   ILE   280      42.067   7.517  13.041  1.00 29.96
ATOM    557  CA  ILE   280      41.687   8.921  13.121  1.00 25.94
ATOM    558  CB  ILE   280      42.155   9.716  11.871  1.00 26.95
ATOM    559  CG2 ILE   280      41.643  11.168  11.923  1.00 15.40
ATOM    560  CG1 ILE   280      43.686   9.702  11.798  1.00 26.73
ATOM    561  CD1 ILE   280      44.255  10.378  10.550  1.00 34.31
ATOM    562  C   ILE   280      40.181   9.074  13.251  1.00 31.39
ATOM    563  O   ILE   280      39.696   9.943  13.973  1.00 35.69
ATOM    564  N   THR   281      39.428   8.226  12.552  1.00 30.90
ATOM    565  CA  THR   281      37.982   8.318  12.592  1.00 33.49
ATOM    566  CB  THR   281      37.321   7.451  11.478  1.00 37.18
ATOM    567  OG1 THR   281      37.760   6.091  11.592  1.00 46.48
ATOM    568  CG2 THR   281      37.703   7.972  10.114  1.00 32.85
ATOM    569  C   THR   281      37.435   7.926  13.968  1.00 29.94
ATOM    570  O   THR   281      36.428   8.473  14.408  1.00 25.55
ATOM    571  N   ARG   282      38.103   6.997  14.641  1.00 32.70
ATOM    572  CA  ARG   282      37.676   6.585  15.975  1.00 34.27
ATOM    573  CB  ARG   282      38.511   5.411  16.479  1.00 33.78
ATOM    574  CG  ARG   282      38.259   4.111  15.743  1.00 45.15
ATOM    575  CD  ARG   282      39.017   2.976  16.404  1.00 58.24
ATOM    576  NE  ARG   282      38.763   1.679  15.776  1.00 68.41
ATOM    577  CZ  ARG   282      39.141   1.344  14.546  1.00 72.31
ATOM    578  NH1 ARG   282      39.802   2.213  13.791  1.00 77.89
ATOM    579  NH2 ARG   282      38.864   0.139  14.066  1.00 69.25
ATOM    580  C   ARG   282      37.789   7.764  16.942  1.00 34.81
ATOM    581  O   ARG   282      37.006   7.886  17.884  1.00 36.03
ATOM    582  N   VAL   283      38.761   8.640  16.696  1.00 31.71
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ATOM	583	CA	VAL	283	38.952	9.815	17.532	1.00	30.16
ATOM	584	CB	VAL	283	40.298	10.524	17.224	1.00	29.00
ATOM	585	CG1	VAL	283	40.448	11.777	18.076	1.00	28.64
ATOM	586	CG2	VAL	283	41.448	9.577	17.487	1.00	28.28
ATOM	587	C	VAL	283	37.801	10.787	17.292	1.00	32.50
ATOM	588	O	VAL	283	37.284	11.388	18.236	1.00	33.48
ATOM	589	N	VAL	284	37.403	10.945	16.028	1.00	30.96
ATOM	590	CA	VAL	284	36.293	11.838	15.694	1.00	29.14
ATOM	591	CB	VAL	284	36.138	12.023	14.158	1.00	31.27
ATOM	592	CG1	VAL	284	34.990	12.985	13.868	1.00	24.21
ATOM	593	CG2	VAL	284	37.450	12.565	13.554	1.00	30.51
ATOM	594	C	VAL	284	34.995	11.260	16.258	1.00	28.89
ATOM	595	O	VAL	284	34.146	12.005	16.743	1.00	27.29
ATOM	596	N	ASP	285	34.845	9.937	16.208	1.00	28.76
ATOM	597	CA	ASP	285	33.639	9.307	16.738	1.00	35.32
ATOM	598	CB	ASP	285	33.627	7.792	16.459	1.00	33.29
ATOM	599	CG	ASP	285	33.523	7.471	14.971	1.00	38.15
ATOM	600	OD1	ASP	285	32.729	8.139	14.276	1.00	34.70
ATOM	601	OD2	ASP	285	34.209	6.532	14.504	1.00	34.43
ATOM	602	C	ASP	285	33.531	9.553	18.248	1.00	36.70
ATOM	603	O	ASP	285	32.431	9.685	18.786	1.00	37.96
ATOM	604	N	PHE	286	34.679	9.624	18.916	1.00	35.96
ATOM	605	CA	PHE	286	34.736	9.869	20.349	1.00	37.10
ATOM	606	CB	PHE	286	36.187	9.777	20.845	1.00	37.97
ATOM	607	CG	PHE	286	36.377	10.219	22.283	1.00	36.50
ATOM	608	CD1	PHE	286	35.815	9.490	23.340	1.00	36.75
ATOM	609	CD2	PHE	286	37.100	11.381	22.575	1.00	33.83
ATOM	610	CE1	PHE	286	35.966	9.917	24.685	1.00	39.55
ATOM	611	CE2	PHE	286	37.265	11.831	23.911	1.00	38.08
ATOM	612	CZ	PHE	286	36.696	11.092	24.972	1.00	34.44
ATOM	613	C	PHE	286	34.179	11.249	20.665	1.00	36.83
ATOM	614	O	PHE	286	33.292	11.401	21.518	1.00	35.61
ATOM	615	N	ALA	287	34.696	12.255	19.968	1.00	37.33
ATOM	616	CA	ALA	287	34.266	13.631	20.171	1.00	36.34
ATOM	617	CB	ALA	287	35.118	14.565	19.325	1.00	36.40
ATOM	618	C	ALA	287	32.785	13.840	19.861	1.00	38.76
ATOM	619	O	ALA	287	32.121	14.641	20.525	1.00	41.98
ATOM	620	N	LYS	288	32.267	13.130	18.862	1.00	38.28
ATOM	621	CA	LYS	288	30.856	13.268	18.499	1.00	45.26
ATOM	622	CB	LYS	288	30.541	12.534	17.188	1.00	48.35
ATOM	623	CG	LYS	288	31.159	13.158	15.951	1.00	51.43
ATOM	624	CD	LYS	288	30.556	12.589	14.665	1.00	60.23
ATOM	625	CE	LYS	288	30.848	11.107	14.479	1.00	62.81
ATOM	626	NZ	LYS	288	32.312	10.852	14.392	1.00	64.69
ATOM	627	C	LYS	288	29.913	12.763	19.586	1.00	43.31
ATOM	628	O	LYS	288	28.791	13.253	19.707	1.00	45.66

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ATOM    629  N   LYS   289      30.367  11.789  20.371  1.00 41.70
ATOM    630  CA  LYS   289      29.548  11.235  21.443  1.00 40.67
ATOM    631  CB  LYS   289      29.984   9.806  21.767  1.00 42.25
ATOM    632  CG  LYS   289      29.912   8.853  20.591  1.00 39.53
ATOM    633  CD  LYS   289      30.341   7.456  21.003  1.00 43.19
ATOM    634  CE  LYS   289      30.454   6.539  19.807  1.00 45.74
ATOM    635  NZ  LYS   289      29.175   6.457  19.049  1.00 52.49
ATOM    636  C   LYS   289      29.585  12.076  22.721  1.00 41.50
ATOM    637  O   LYS   289      29.030  11.676  23.742  1.00 39.77
ATOM    638  N   LEU   290      30.242  13.235  22.661  1.00 40.68
ATOM    639  CA  LEU   290      30.307  14.143  23.811  1.00 39.33
ATOM    640  CB  LEU   290      31.757  14.590  24.075  1.00 36.14
ATOM    641  CG  LEU   290      32.815  13.526  24.401  1.00 34.81
ATOM    642  CD1 LEU   290      34.155  14.200  24.558  1.00 29.07
ATOM    643  CD2 LEU   290      32.445  12.764  25.667  1.00 33.45
ATOM    644  C   LEU   290      29.448  15.368  23.481  1.00 40.08
ATOM    645  O   LEU   290      29.828  16.196  22.655  1.00 42.00
ATOM    646  N   PRO   291      28.279  15.500  24.137  1.00 40.27
ATOM    647  CD  PRO   291      27.716  14.625  25.185  1.00 39.65
ATOM    648  CA  PRO   291      27.372  16.628  23.899  1.00 38.28
ATOM    649  CB  PRO   291      26.327  16.447  24.997  1.00 35.88
ATOM    650  CG  PRO   291      26.230  14.932  25.071  1.00 34.19
ATOM    651  C   PRO   291      28.010  18.006  23.910  1.00 40.05
ATOM    652  O   PRO   291      27.663  18.857  23.089  1.00 41.33
ATOM    653  N   MET   292      28.933  18.235  24.837  1.00 40.59
ATOM    654  CA  MET   292      29.607  19.529  24.932  1.00 42.86
ATOM    655  CB  MET   292      30.635  19.521  26.059  1.00 43.28
ATOM    656  CG  MET   292      30.050  19.286  27.428  1.00 50.35
ATOM    657  SD  MET   292      31.329  19.157  28.679  1.00 51.17
ATOM    658  CE  MET   292      30.331  18.787  30.111  1.00 54.63
ATOM    659  C   MET   292      30.311  19.869  23.629  1.00 41.05
ATOM    660  O   MET   292      30.341  21.024  23.210  1.00 39.66
ATOM    661  N   PHE   293      30.882  18.854  22.992  1.00 39.30
ATOM    662  CA  PHE   293      31.594  19.057  21.747  1.00 40.92
ATOM    663  CB  PHE   293      32.300  17.772  21.335  1.00 40.98
ATOM    664  CG  PHE   293      33.117  17.902  20.070  1.00 42.78
ATOM    665  CD1 PHE   293      34.272  18.692  20.046  1.00 44.40
ATOM    666  CD2 PHE   293      32.727  17.235  18.902  1.00 43.66
ATOM    667  CE1 PHE   293      35.051  18.823  18.865  1.00 39.83
ATOM    668  CE2 PHE   293      33.483  17.348  17.710  1.00 46.21
ATOM    669  CZ  PHE   293      34.654  18.147  17.693  1.00 45.18
ATOM    670  C   PHE   293      30.653  19.492  20.624  1.00 45.54
ATOM    671  O   PHE   293      30.985  20.377  19.829  1.00 42.01
ATOM    672  N   CYS   294      29.468  18.895  20.579  1.00 47.05
ATOM    673  CA  CYS   294      28.545  19.200  19.512  1.00 50.15
ATOM    674  CB  CYS   294      27.320  18.329  19.584  1.00 45.90
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ATOM    675  SG  CYS   294      27.680  16.529  19.352  1.00 51.50
ATOM    676  C   CYS   294      28.062  20.636  19.582  1.00 51.38
ATOM    677  O   CYS   294      27.682  21.199  18.543  1.00 53.83
ATOM    678  N   GLU   295      27.996  21.170  20.802  1.00 49.72
ATOM    679  CA  GLU   295      27.541  22.535  21.067  1.00 52.53
ATOM    680  CB  GLU   295      27.384  22.762  22.575  1.00 57.40
ATOM    681  CG  GLU   295      26.179  22.090  23.208  1.00 69.63
ATOM    682  CD  GLU   295      24.871  22.731  22.785  1.00 78.49
ATOM    683  OE1 GLU   295      24.698  23.942  23.041  1.00 82.82
ATOM    684  OE2 GLU   295      24.017  22.029  22.199  1.00 85.30
ATOM    685  C   GLU   295      28.484  23.589  20.515  1.00 48.54
ATOM    686  O   GLU   295      28.170  24.777  20.537  1.00 49.82
ATOM    687  N   LEU   296      29.637  23.149  20.030  1.00 43.79
ATOM    688  CA  LEU   296      30.629  24.066  19.476  1.00 45.42
ATOM    689  CB  LEU   296      32.040  23.541  19.771  1.00 41.04
ATOM    690  CG  LEU   296      32.416  23.394  21.252  1.00 42.74
ATOM    691  CD1 LEU   296      33.789  22.753  21.352  1.00 40.99
ATOM    692  CD2 LEU   296      32.406  24.755  21.945  1.00 39.44
ATOM    693  C   LEU   296      30.448  24.239  17.968  1.00 45.56
ATOM    694  O   LEU   296      29.966  23.333  17.278  1.00 43.07
ATOM    695  N   PRO   297      30.823  25.414  17.436  1.00 46.99
ATOM    696  CD  PRO   297      31.372  26.613  18.083  1.00 47.12
ATOM    697  CA  PRO   297      30.689  25.650  15.998  1.00 49.61
ATOM    698  CB  PRO   297      31.106  27.118  15.861  1.00 49.91
ATOM    699  CG  PRO   297      30.757  27.693  17.230  1.00 51.28
ATOM    700  C   PRO   297      31.600  24.717  15.202  1.00 49.59
ATOM    701  O   PRO   297      32.727  24.446  15.615  1.00 51.66
ATOM    702  N   CYS   298      31.093  24.227  14.075  1.00 51.02
ATOM    703  CA  CYS   298      31.817  23.322  13.158  1.00 52.86
ATOM    704  CB  CYS   298      31.100  23.260  11.804  1.00 54.57
ATOM    705  SG  CYS   298      31.935  24.249  10.470  1.00 67.87
ATOM    706  C   CYS   298      33.269  23.797  12.974  1.00 48.51
ATOM    707  O   CYS   298      34.197  22.991  12.819  1.00 49.58
ATOM    708  N   GLU   299      33.464  25.113  13.019  1.00 44.17
ATOM    709  CA  GLU   299      34.797  25.692  12.890  1.00 47.57
ATOM    710  CB  GLU   299      34.741  27.227  12.912  1.00 49.92
ATOM    711  CG  GLU   299      34.001  27.871  11.747  1.00 59.30
ATOM    712  CD  GLU   299      32.489  27.763  11.848  1.00 63.80
ATOM    713  OE1 GLU   299      31.805  28.162  10.882  1.00 69.03
ATOM    714  OE2 GLU   299      31.979  27.297  12.889  1.00 67.10
ATOM    715  C   GLU   299      35.698  25.213  14.031  1.00 46.57
ATOM    716  O   GLU   299      36.772  24.659  13.787  1.00 44.65
ATOM    717  N   ASP   300      35.263  25.432  15.274  1.00 45.17
ATOM    718  CA  ASP   300      36.046  25.008  16.433  1.00 43.32
ATOM    719  CB  ASP   300      35.442  25.517  17.747  1.00 37.38
ATOM    720  CG  ASP   300      35.567  27.016  17.910  1.00 36.23
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ATOM	721	OD1	ASP	300	36.486	27.613	17.313	1.00	35.87
ATOM	722	OD2	ASP	300	34.769	27.601	18.669	1.00	40.14
ATOM	723	C	ASP	300	36.174	23.495	16.513	1.00	42.81
ATOM	724	O	ASP	300	37.193	22.979	16.974	1.00	46.02
ATOM	725	N	GLN	301	35.139	22.788	16.066	1.00	38.60
ATOM	726	CA	GLN	301	35.151	21.334	16.086	1.00	40.00
ATOM	727	CB	GLN	301	33.815	20.783	15.576	1.00	38.59
ATOM	728	CG	GLN	301	32.608	21.334	16.317	1.00	40.26
ATOM	729	CD	GLN	301	31.311	20.696	15.869	1.00	44.15
ATOM	730	OE1	GLN	301	31.074	20.527	14.673	1.00	45.73
ATOM	731	NE2	GLN	301	30.450	20.363	16.824	1.00	46.13
ATOM	732	C	GLN	301	36.298	20.807	15.227	1.00	41.64
ATOM	733	O	GLN	301	36.975	19.850	15.601	1.00	45.02
ATOM	734	N	ILE	302	36.523	21.441	14.077	1.00	41.01
ATOM	735	CA	ILE	302	37.607	21.029	13.189	1.00	40.23
ATOM	736	CB	ILE	302	37.580	21.798	11.825	1.00	39.52
ATOM	737	CG2	ILE	302	38.724	21.308	10.931	1.00	31.98
ATOM	738	CG1	ILE	302	36.230	21.607	11.119	1.00	40.77
ATOM	739	CD1	ILE	302	35.895	20.166	10.733	1.00	45.43
ATOM	740	C	ILE	302	38.948	21.322	13.869	1.00	38.58
ATOM	741	O	ILE	302	39.811	20.452	13.938	1.00	40.81
ATOM	742	N	ILE	303	39.110	22.547	14.364	1.00	37.50
ATOM	743	CA	ILE	303	40.343	22.958	15.030	1.00	39.33
ATOM	744	CB	ILE	303	40.263	24.442	15.501	1.00	39.06
ATOM	745	CG2	ILE	303	41.525	24.822	16.279	1.00	36.19
ATOM	746	CG1	ILE	303	40.103	25.358	14.280	1.00	40.15
ATOM	747	CD1	ILE	303	39.972	26.846	14.602	1.00	36.93
ATOM	748	C	ILE	303	40.676	22.061	16.222	1.00	36.49
ATOM	749	O	ILE	303	41.818	21.623	16.378	1.00	36.58
ATOM	750	N	LEU	304	39.674	21.788	17.057	1.00	32.91
ATOM	751	CA	LEU	304	39.851	20.940	18.234	1.00	27.55
ATOM	752	CB	LEU	304	38.546	20.875	19.026	1.00	22.35
ATOM	753	CG	LEU	304	38.472	21.629	20.361	1.00	26.88
ATOM	754	CD1	LEU	304	39.096	22.998	20.275	1.00	24.82
ATOM	755	CD2	LEU	304	37.024	21.728	20.787	1.00	23.69
ATOM	756	C	LEU	304	40.313	19.534	17.855	1.00	28.05
ATOM	757	O	LEU	304	41.277	19.013	18.429	1.00	24.68
ATOM	758	N	LEU	305	39.637	18.929	16.882	1.00	26.34
ATOM	759	CA	LEU	305	39.997	17.588	16.436	1.00	30.91
ATOM	760	CB	LEU	305	38.937	17.055	15.466	1.00	32.50
ATOM	761	CG	LEU	305	37.585	16.757	16.132	1.00	33.36
ATOM	762	CD1	LEU	305	36.557	16.439	15.079	1.00	33.87
ATOM	763	CD2	LEU	305	37.733	15.581	17.101	1.00	31.72
ATOM	764	C	LEU	305	41.381	17.523	15.796	1.00	29.76
ATOM	765	O	LEU	305	42.109	16.553	15.990	1.00	29.33
ATOM	766	N	LYS	306	41.754	18.554	15.048	1.00	29.72

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ATOM    767  CA  LYS   306      43.065  18.569  14.409  1.00 34.28
ATOM    768  CB  LYS   306      43.122  19.673  13.345  1.00 35.98
ATOM    769  CG  LYS   306      42.140  19.465  12.206  1.00 43.35
ATOM    770  CD  LYS   306      42.195  20.583  11.170  1.00 51.50
ATOM    771  CE  LYS   306      43.532  20.639  10.446  1.00 53.26
ATOM    772  NZ  LYS   306      43.522  21.702   9.409  1.00 59.61
ATOM    773  C   LYS   306      44.183  18.777  15.434  1.00 35.25
ATOM    774  O   LYS   306      45.312  18.332  15.231  1.00 33.95
ATOM    775  N   GLY   307      43.853  19.446  16.536  1.00 35.79
ATOM    776  CA  GLY   307      44.836  19.700  17.576  1.00 34.59
ATOM    777  C   GLY   307      45.075  18.562  18.559  1.00 33.80
ATOM    778  O   GLY   307      46.200  18.360  19.008  1.00 31.59
ATOM    779  N   CYS   308      44.030  17.806  18.880  1.00 31.15
ATOM    780  CA  CYS   308      44.153  16.712  19.839  1.00 29.04
ATOM    781  CB  CYS   308      42.929  16.667  20.750  1.00 27.59
ATOM    782  SG  CYS   308      41.452  15.974  19.941  1.00 30.50
ATOM    783  C   CYS   308      44.289  15.339  19.208  1.00 30.59
ATOM    784  O   CYS   308      44.609  14.374  19.899  1.00 33.77
ATOM    785  N   CYS   309      44.053  15.247  17.907  1.00 28.46
ATOM    786  CA  CYS   309      44.099  13.961  17.219  1.00 30.10
ATOM    787  CB  CYS   309      43.983  14.161  15.706  1.00 33.43
ATOM    788  SG  CYS   309      43.761  12.613  14.819  1.00 35.20
ATOM    789  C   CYS   309      45.301  13.071  17.524  1.00 27.72
ATOM    790  O   CYS   309      45.135  11.907  17.913  1.00 27.69
ATOM    791  N   MET   310      46.508  13.594  17.339  1.00 26.15
ATOM    792  CA  MET   310      47.700  12.798  17.605  1.00 26.06
ATOM    793  CB  MET   310      48.928  13.439  16.951  1.00 25.32
ATOM    794  CG  MET   310      50.207  12.648  17.132  1.00 24.08
ATOM    795  SD  MET   310      50.101  10.991  16.423  1.00 27.71
ATOM    796  CE  MET   310      51.674  10.307  16.934  1.00 28.50
ATOM    797  C   MET   310      47.941  12.612  19.113  1.00 25.94
ATOM    798  O   MET   310      48.592  11.653  19.526  1.00 28.09
ATOM    799  N   GLU   311      47.405  13.522  19.923  1.00 25.39
ATOM    800  CA  GLU   311      47.560  13.445  21.370  1.00 27.03
ATOM    801  CB  GLU   311      47.099  14.748  22.030  1.00 24.39
ATOM    802  CG  GLU   311      47.610  15.999  21.331  1.00 26.00
ATOM    803  CD  GLU   311      47.292  17.271  22.084  1.00 23.95
ATOM    804  OE1 GLU   311      46.182  17.379  22.640  1.00 19.72
ATOM    805  OE2 GLU   311      48.150  18.181  22.088  1.00 26.51
ATOM    806  C   GLU   311      46.727  12.272  21.902  1.00 27.51
ATOM    807  O   GLU   311      47.152  11.552  22.807  1.00 29.67
ATOM    808  N   ILE   312      45.547  12.086  21.326  1.00 26.82
ATOM    809  CA  ILE   312      44.661  11.001  21.724  1.00 25.71
ATOM    810  CB  ILE   312      43.194  11.296  21.304  1.00 23.35
ATOM    811  CG2 ILE   312      42.301  10.068  21.583  1.00 20.27
ATOM    812  CG1 ILE   312      42.690  12.534  22.062  1.00 20.88
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ATOM    813  CD1 ILE  312    41.244  12.961  21.755  1.00  18.15
ATOM    814  C   ILE  312    45.116   9.665  21.132  1.00  27.91
ATOM    815  O   ILE  312    45.064   8.628  21.804  1.00  28.96
ATOM    816  N   MET  313    45.582   9.683  19.886  1.00  27.66
ATOM    817  CA  MET  313    46.045   8.447  19.257  1.00  30.18
ATOM    818  CB  MET  313    46.386   8.662  17.771  1.00  36.89
ATOM    819  CG  MET  313    45.186   8.938  16.861  1.00  37.95
ATOM    820  SD  MET  313    45.624   8.943  15.096  1.00  42.38
ATOM    821  CE  MET  313    46.724  10.319  14.999  1.00  40.68
ATOM    822  C   MET  313    47.264   7.897  19.975  1.00  27.43
ATOM    823  O   MET  313    47.351   6.690  20.219  1.00  28.61
ATOM    824  N   SER  314    48.202   8.776  20.318  1.00  24.88
ATOM    825  CA  SER  314    49.416   8.352  21.011  1.00  27.98
ATOM    826  CB  SER  314    50.420   9.511  21.118  1.00  29.64
ATOM    827  OG  SER  314    49.912  10.560  21.911  1.00  43.44
ATOM    828  C   SER  314    49.082   7.818  22.402  1.00  22.30
ATOM    829  O   SER  314    49.737   6.895  22.892  1.00  24.18
ATOM    830  N   LEU  315    48.070   8.395  23.039  1.00  23.99
ATOM    831  CA  LEU  315    47.646   7.918  24.365  1.00  25.07
ATOM    832  CB  LEU  315    46.580   8.842  24.965  1.00  19.11
ATOM    833  CG  LEU  315    45.863   8.355  26.228  1.00  20.39
ATOM    834  CD1 LEU  315    46.872   8.076  27.362  1.00  18.92
ATOM    835  CD2 LEU  315    44.848   9.401  26.655  1.00  12.93
ATOM    836  C   LEU  315    47.070   6.518  24.222  1.00  24.53
ATOM    837  O   LEU  315    47.394   5.615  24.992  1.00  26.32
ATOM    838  N   ARG  316    46.212   6.338  23.220  1.00  28.18
ATOM    839  CA  ARG  316    45.595   5.041  22.978  1.00  27.54
ATOM    840  CB  ARG  316    44.575   5.155  21.848  1.00  27.39
ATOM    841  CG  ARG  316    43.340   5.929  22.253  1.00  22.00
ATOM    842  CD  ARG  316    42.291   5.902  21.172  1.00  18.78
ATOM    843  NE  ARG  316    40.975   6.205  21.719  1.00  26.57
ATOM    844  CZ  ARG  316    39.852   6.224  21.014  1.00  30.81
ATOM    845  NH1 ARG  316    39.878   5.972  19.711  1.00  33.71
ATOM    846  NH2 ARG  316    38.692   6.471  21.613  1.00  33.13
ATOM    847  C   ARG  316    46.612   3.949  22.682  1.00  28.09
ATOM    848  O   ARG  316    46.399   2.790  23.027  1.00  32.41
ATOM    849  N   ALA  317    47.718   4.317  22.047  1.00  28.36
ATOM    850  CA  ALA  317    48.771   3.359  21.744  1.00  26.64
ATOM    851  CB  ALA  317    49.674   3.904  20.643  1.00  22.93
ATOM    852  C   ALA  317    49.591   3.115  23.002  1.00  28.35
ATOM    853  O   ALA  317    49.968   1.979  23.312  1.00  32.10
ATOM    854  N   ALA  318    49.863   4.197  23.727  1.00  29.12
ATOM    855  CA  ALA  318    50.655   4.123  24.953  1.00  27.50
ATOM    856  CB  ALA  318    50.854   5.518  25.522  1.00  28.39
ATOM    857  C   ALA  318    50.053   3.215  26.013  1.00  28.10
ATOM    858  O   ALA  318    50.783   2.491  26.684  1.00  28.18
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ATOM	859	N	VAL	319	48.730	3.245	26.165	1.00	29.16
ATOM	860	CA	VAL	319	48.082	2.414	27.176	1.00	35.24
ATOM	861	CB	VAL	319	46.663	2.933	27.541	1.00	27.34
ATOM	862	CG1	VAL	319	46.759	4.324	28.136	1.00	29.96
ATOM	863	CG2	VAL	319	45.773	2.936	26.322	1.00	31.70
ATOM	864	C·	VAL	319	47.970	0.955	26.764	1.00	40.01
ATOM	865	O	VAL	319	47.448	0.129	27.515	1.00	42.70
ATOM	866	N	ARG	320	48.460	0.644	25.565	1.00	38.64
ATOM	867	CA	ARG	320	48.436	-0.715	25.041	1.00	38.61
ATOM	868	CB	ARG	320	47.764	-0.751	23.674	1.00	37.26
ATOM	869	CG	ARG	320	46.258	-0.655	23.720	1.00	43.12
ATOM	870	CD	ARG	320	45.712	-0.368	22.339	1.00	50.79
ATOM	871	NE	ARG	320	44.260	-0.446	22.286	1.00	54.71
ATOM	872	CZ	ARG	320	43.527	0.074	21.306	1.00	57.89
ATOM	873	NH1	ARG	320	44.119	0.713	20.300	1.00	49.08
ATOM	874	NH2	ARG	320	42.206	-0.058	21.326	1.00	59.59
ATOM	875	C	ARG	320	49.852	-1.247	24.930	1.00	42.14
ATOM	876	O	ARG	320	50.162	-2.055	24.051	1.00	46.30
ATOM	877	N	TYR	321	50.712	-0.772	25.822	1.00	42.04
ATOM	878	CA	TYR	321	52.098	-1.202	25.852	1.00	42.70
ATOM	879	CB	TYR	321	52.971	-0.133	26.529	1.00	38.01
ATOM	880	CG	TYR	321	54.416	-0.579	26.734	1.00	37.94
ATOM	881	CD1	TYR	321	55.275	-0.779	25.636	1.00	33.85
ATOM	882	CE1	TYR	321	56.581	-1.297	25.813	1.00	34.49
ATOM	883	CD2	TYR	321	54.892	-0.894	28.016	1.00	28.03
ATOM	884	CE2	TYR	321	56.194	-1.411	28.207	1.00	32.69
ATOM	885	CZ	TYR	321	57.026	-1.614	27.103	1.00	35.18
ATOM	886	OH	TYR	321	58.289	-2.158	27.288	1.00	39.48
ATOM	887	C	TYR	321	52.189	-2.515	26.629	1.00	45.51
ATOM	888	O	TYR	321	51.571	-2.662	27.687	1.00	48.02
ATOM	889	N	ASP	322	52.945	-3.471	26.095	1.00	44.56
ATOM	890	CA	ASP	322	53.129	-4.764	26.753	1.00	45.86
ATOM	891	CB	ASP	322	52.697	-5.899	25.816	1.00	46.64
ATOM	892	C	ASP	322	54.606	-4.910	27.098	1.00	45.82
ATOM	893	O	ASP	322	55.434	-5.109	26.214	1.00	45.38
ATOM	894	N	PRO	323	54.962	-4.803	28.393	1.00	46.53
ATOM	895	CD	PRO	323	54.123	-4.541	29.572	1.00	47.16
ATOM	896	CA	PRO	323	56.366	-4.932	28.805	1.00	46.63
ATOM	897	CB	PRO	323	56.293	-4.667	30.308	1.00	43.95
ATOM	898	CG	PRO	323	54.926	-5.223	30.655	1.00	43.93
ATOM	899	C	PRO	323	56.993	-6.285	28.478	1.00	48.34
ATOM	900	O	PRO	323	58.217	-6.407	28.379	1.00	50.84
ATOM	901	N	GLU	324	56.149	-7.301	28.315	1.00	52.39
ATOM	902	CA	GLU	324	56.621	-8.646	28.005	1.00	55.85
ATOM	903	CB	GLU	324	55.453	-9.633	28.048	1.00	55.54
ATOM	904	C	GLU	324	57.283	-8.670	26.632	1.00	54.94

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ATOM   905 O    GLU  324    58.460  -9.013  26.502  1.00 59.81
ATOM   906 N    SER  325    56.522  -8.299  25.611  1.00 52.95
ATOM   907 CA   SER  325    57.021  -8.269  24.244  1.00 50.10
ATOM   908 CB   SER  325    55.889  -8.613  23.279  1.00 48.23
ATOM   909 OG   SER  325    54.788  -7.749  23.471  1.00 48.71
ATOM   910 C.   SER  325    57.608  -6.908  23.879  1.00 50.61
ATOM   911 O    SER  325    58.194  -6.743  22.808  1.00 52.19
ATOM   912 N    GLU  326    57.450  -5.939  24.786  1.00 45.64
ATOM   913 CA   GLU  326    57.938  -4.579  24.588  1.00 43.35
ATOM   914 CB   GLU  326    59.469  -4.562  24.587  1.00 42.74
ATOM   915 CG   GLU  326    60.053  -5.016  25.909  1.00 50.32
ATOM   916 CD   GLU  326    61.565  -5.067  25.907  1.00 56.34
ATOM   917 OE1  GLU  326    62.139  -5.407  26.966  1.00 59.31
ATOM   918 OE2  GLU  326    62.178  -4.774  24.856  1.00 55.74
ATOM   919 C    GLU  326    57.397  -3.993  23.291  1.00 40.23
ATOM   920 O    GLU  326    58.145  -3.474  22.465  1.00 40.44
ATOM   921 N    THR  327    56.080  -4.079  23.127  1.00 35.90
ATOM   922 CA   THR  327    55.427  -3.573  21.936  1.00 37.29
ATOM   923 CB   THR  327    54.983  -4.717  21.008  1.00 37.63
ATOM   924 OG1  THR  327    53.994  -5.503  21.674  1.00 38.12
ATOM   925 CG2  THR  327    56.165  -5.609  20.635  1.00 39.90
ATOM   926 C    THR  327    54.170  -2.780  22.282  1.00 39.49
ATOM   927 O    THR  327    53.603  -2.930  23.364  1.00 40.50
ATOM   928 N    LEU  328    53.758  -1.933  21.347  1.00 36.64
ATOM   929 CA   LEU  328    52.544  -1.136  21.480  1.00 37.73
ATOM   930 CB   LEU  328    52.791   0.340  21.127  1.00 37.78
ATOM   931 CG   LEU  328    53.667   1.257  21.982  1.00 36.26
ATOM   932 CD1  LEU  328    53.690   2.641  21.348  1.00 36.56
ATOM   933 CD2  LEU  328    53.101   1.351  23.396  1.00 39.85
ATOM   934 C    LEU  328    51.617  -1.722  20.431  1.00 37.27
ATOM   935 O    LEU  328    52.083  -2.233  19.410  1.00 34.96
ATOM   936 N    THR  329    50.314  -1.652  20.669  1.00 39.73
ATOM   937 CA   THR  329    49.368  -2.173  19.701  1.00 40.81
ATOM   938 CB   THR  329    48.401  -3.176  20.349  1.00 42.67
ATOM   939 OG1  THR  329    49.156  -4.271  20.896  1.00 42.52
ATOM   940 CG2  THR  329    47.425  -3.722  19.315  1.00 43.52
ATOM   941 C    THR  329    48.591  -1.034  19.058  1.00 44.31
ATOM   942 O    THR  329    47.825  -0.325  19.712  1.00 43.72
ATOM   943 N    LEU  330    48.822  -0.859  17.759  1.00 44.62
ATOM   944 CA   LEU  330    48.179   0.182  16.972  1.00 45.09
ATOM   945 CB   LEU  330    49.056   0.545  15.766  1.00 44.66
ATOM   946 CG   LEU  330    50.329   1.393  15.951  1.00 51.06
ATOM   947 CD1  LEU  330    51.195   0.890  17.095  1.00 48.58
ATOM   948 CD2  LEU  330    51.107   1.387  14.638  1.00 45.18
ATOM   949 C    LEU  330    46.802  -0.264  16.501  1.00 48.06
ATOM   950 O    LEU  330    46.634  -1.386  16.012  1.00 49.33
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ATOM   951  N   ASN   331      45.826   0.618  16.663  1.00 52.20
ATOM   952  CA  ASN   331      44.450   0.363  16.257  1.00 54.41
ATOM   953  CB  ASN   331      44.370   0.353  14.731  1.00 54.94
ATOM   954  CG  ASN   331      42.970   0.603  14.219  1.00 60.35
ATOM   955  OD1 ASN   331      42.375   1.642  14.501  1.00 61.84
ATOM   956  ND2 ASN   331      42.438  -0.344  13.459  1.00 65.92
ATOM   957  C   ASN   331      43.940  -0.963  16.836  1.00 58.00
ATOM   958  O   ASN   331      42.985  -1.557  16.328  1.00 60.17
ATOM   959  N   GLY   332      44.590  -1.414  17.908  1.00 58.45
ATOM   960  CA  GLY   332      44.215  -2.658  18.556  1.00 58.55
ATOM   961  C   GLY   332      44.408  -3.880  17.680  1.00 59.79
ATOM   962  O   GLY   332      43.892  -4.953  17.993  1.00 61.32
ATOM   963  N   GLU   333      45.165  -3.725  16.597  1.00 60.28
ATOM   964  CA  GLU   333      45.408  -4.821  15.659  1.00 59.13
ATOM   965  CB  GLU   333      44.817  -4.478  14.293  1.00 62.40
ATOM   966  CG  GLU   333      43.345  -4.129  14.296  1.00 75.69
ATOM   967  CD  GLU   333      42.851  -3.731  12.917  1.00 80.41
ATOM   968  OE1 GLU   333      43.374  -2.740  12.359  1.00 79.98
ATOM   969  OE2 GLU   333      41.942  -4.412  12.392  1.00 83.81
ATOM   970  C   GLU   333      46.881  -5.146  15.452  1.00 57.18
ATOM   971  O   GLU   333      47.291  -6.301  15.545  1.00 57.50
ATOM   972  N   MET   334      47.663  -4.112  15.166  1.00 55.20
ATOM   973  CA  MET   334      49.085  -4.245  14.873  1.00 50.85
ATOM   974  CB  MET   334      49.416  -3.334  13.687  1.00 48.70
ATOM   975  CG  MET   334      50.844  -3.412  13.181  1.00 45.39
ATOM   976  SD  MET   334      51.159  -2.124  11.959  1.00 44.56
ATOM   977  CE  MET   334      49.908  -2.477  10.749  1.00 45.25
ATOM   978  C   MET   334      50.041  -3.941  16.026  1.00 51.59
ATOM   979  O   MET   334      50.104  -2.810  16.508  1.00 52.52
ATOM   980  N   ALA   335      50.796  -4.946  16.450  1.00 51.00
ATOM   981  CA  ALA   335      51.769  -4.787  17.527  1.00 48.98
ATOM   982  CB  ALA   335      51.850  -6.062  18.347  1.00 47.86
ATOM   983  C   ALA   335      53.136  -4.470  16.917  1.00 51.01
ATOM   984  O   ALA   335      53.655  -5.242  16.109  1.00 51.61
ATOM   985  N   VAL   336      53.718  -3.336  17.307  1.00 46.62
ATOM   986  CA  VAL   336      55.016  -2.926  16.783  1.00 42.35
ATOM   987  CB  VAL   336      54.876  -1.687  15.877  1.00 42.41
ATOM   988  CG1 VAL   336      53.963  -2.004  14.707  1.00 42.00
ATOM   989  CG2 VAL   336      54.313  -0.506  16.676  1.00 40.32
ATOM   990  C   VAL   336      56.023  -2.608  17.883  1.00 45.33
ATOM   991  O   VAL   336      55.650  -2.309  19.019  1.00 47.42
ATOM   992  N   THR   337      57.310  -2.678  17.541  1.00 41.60
ATOM   993  CA  THR   337      58.357  -2.381  18.508  1.00 39.69
ATOM   994  CB  THR   337      59.608  -3.259  18.296  1.00 41.35
ATOM   995  OG1 THR   337      60.168  -2.985  17.007  1.00 49.35
ATOM   996  CG2 THR   337      59.253  -4.734  18.392  1.00 40.38
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ATOM	997	C	THR	337	58.777	-0.924	18.367	1.00	37.88
ATOM	998	O	THR	337	58.312	-0.218	17.473	1.00	34.06
ATOM	999	N	ARG	338	59.655	-0.489	19.268	1.00	37.61
ATOM	1000	CA	ARG	338	60.171	0.876	19.268	1.00	38.68
ATOM	1001	CB	ARG	338	61.177	1.041	20.424	1.00	35.95
ATOM	1002	CG	ARG	338	61.804	2.434	20.570	1.00	38.83
ATOM	1003	CD	ARG	338	62.791	2.462	21.749	1.00	35.88
ATOM	1004	NE	ARG	338	62.114	2.277	23.035	1.00	37.42
ATOM	1005	CZ	ARG	338	61.858	3.256	23.902	1.00	30.20
ATOM	1006	NH1	ARG	338	62.224	4.501	23.636	1.00	27.98
ATOM	1007	NH2	ARG	338	61.213	2.992	25.025	1.00	27.40
ATOM	1008	C	ARG	338	60.843	1.158	17.925	1.00	38.09
ATOM	1009	O	ARG	338	60.529	2.142	17.251	1.00	34.12
ATOM	1010	N	GLY	339	61.755	0.267	17.535	1.00	41.25
ATOM	1011	CA	GLY	339	62.475	0.416	16.282	1.00	41.35
ATOM	1012	C	GLY	339	61.594	0.463	15.046	1.00	41.23
ATOM	1013	O	GLY	339	61.811	1.288	14.159	1.00	38.30
ATOM	1014	N	GLN	340	60.594	-0.414	14.982	1.00	38.58
ATOM	1015	CA	GLN	340	59.704	-0.449	13.826	1.00	40.79
ATOM	1016	CB	GLN	340	58.757	-1.651	13.911	1.00	40.82
ATOM	1017	CG	GLN	340	59.450	-2.995	13.944	1.00	41.10
ATOM	1018	CD	GLN	340	58.468	-4.144	13.890	1.00	48.84
ATOM	1019	OE1	GLN	340	57.529	-4.208	14.679	1.00	50.53
ATOM	1020	NE2	GLN	340	58.685	-5.068	12.959	1.00	54.25
ATOM	1021	C	GLN	340	58.884	0.822	13.679	1.00	41.50
ATOM	1022	O	GLN	340	58.725	1.342	12.576	1.00	42.72
ATOM	1023	N	LEU	341	58.360	1.324	14.795	1.00	42.00
ATOM	1024	CA	LEU	341	57.546	2.532	14.775	1.00	38.10
ATOM	1025	CB	LEU	341	56.868	2.740	16.133	1.00	36.66
ATOM	1026	CG	LEU	341	55.886	3.914	16.267	1.00	39.94
ATOM	1027	CD1	LEU	341	54.711	3.741	15.311	1.00	34.98
ATOM	1028	CD2	LEU	341	55.389	3.989	17.700	1.00	40.95
ATOM	1029	C	LEU	341	58.404	3.743	14.423	1.00	36.37
ATOM	1030	O	LEU	341	57.980	4.620	13.668	1.00	37.89
ATOM	1031	N	LYS	342	59.616	3.777	14.969	1.00	33.29
ATOM	1032	CA	LYS	342	60.542	4.872	14.723	1.00	35.17
ATOM	1033	CB	LYS	342	61.801	4.687	15.582	1.00	34.97
ATOM	1034	CG	LYS	342	62.764	5.863	15.519	1.00	40.00
ATOM	1035	CD	LYS	342	63.868	5.739	16.555	1.00	34.48
ATOM	1036	CE	LYS	342	64.709	7.001	16.596	1.00	37.54
ATOM	1037	NZ	LYS	342	65.716	6.972	17.689	1.00	42.32
ATOM	1038	C	LYS	342	60.928	4.970	13.235	1.00	38.29
ATOM	1039	O	LYS	342	60.621	5.963	12.569	1.00	36.23
ATOM	1040	N	ASN	343	61.585	3.932	12.721	1.00	39.25
ATOM	1041	CA	ASN	343	62.014	3.903	11.328	1.00	40.19
ATOM	1042	CB	ASN	343	62.808	2.627	11.050	1.00	37.96

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ATOM   1043  CG  ASN   343      63.937    2.429   12.027   1.00 39.22
ATOM   1044  OD1 ASN   343      64.648    3.376   12.374   1.00 42.37
ATOM   1045  ND2 ASN   343      64.125    1.197   12.471   1.00 42.19
ATOM   1046  C   ASN   343      60.831    3.997   10.368   1.00 40.12
ATOM   1047  O   ASN   343      60.991    4.371    9.208   1.00 36.01
ATOM   1048  N   GLY   344      59.645    3.665   10.868   1.00 40.95
ATOM   1049  CA  GLY   344      58.439    3.721   10.057   1.00 39.25
ATOM   1050  C   GLY   344      57.947    5.131    9.772   1.00 38.26
ATOM   1051  O   GLY   344      56.971    5.308    9.044   1.00 35.69
ATOM   1052  N   GLY   345      58.604    6.135   10.359   1.00 35.89
ATOM   1053  CA  GLY   345      58.212    7.510   10.110   1.00 34.00
ATOM   1054  C   GLY   345      58.050    8.444   11.300   1.00 38.64
ATOM   1055  O   GLY   345      57.902    9.652   11.116   1.00 38.14
ATOM   1056  N   LEU   346      58.085    7.912   12.520   1.00 39.52
ATOM   1057  CA  LEU   346      57.904    8.761   13.692   1.00 36.05
ATOM   1058  CB  LEU   346      57.039    8.048   14.738   1.00 35.72
ATOM   1059  CG  LEU   346      55.561    7.864   14.371   1.00 34.89
ATOM   1060  CD1 LEU   346      54.850    7.132   15.494   1.00 44.09
ATOM   1061  CD2 LEU   346      54.903    9.213   14.146   1.00 34.84
ATOM   1062  C   LEU   346      59.189    9.264   14.339   1.00 33.52
ATOM   1063  O   LEU   346      59.171   10.257   15.066   1.00 35.58
ATOM   1064  N   GLY   347      60.299    8.595   14.067   1.00 30.47
ATOM   1065  CA  GLY   347      61.559    9.017   14.661   1.00 33.01
ATOM   1066  C   GLY   347      61.504    9.069   16.182   1.00 30.72
ATOM   1067  O   GLY   347      60.967    8.160   16.812   1.00 30.89
ATOM   1068  N   VAL   348      62.051   10.132   16.765   1.00 31.30
ATOM   1069  CA  VAL   348      62.084   10.291   18.221   1.00 31.27
ATOM   1070  CB  VAL   348      62.843   11.612   18.620   1.00 31.66
ATOM   1071  CG1 VAL   348      62.071   12.841   18.146   1.00 20.19
ATOM   1072  CG2 VAL   348      63.080   11.651   20.118   1.00 24.77
ATOM   1073  C   VAL   348      60.683   10.273   18.855   1.00 33.84
ATOM   1074  O   VAL   348      60.546   10.034   20.050   1.00 29.99
ATOM   1075  N   VAL   349      59.649   10.518   18.049   1.00 33.31
ATOM   1076  CA  VAL   349      58.270   10.495   18.538   1.00 32.23
ATOM   1077  CB  VAL   349      57.279   10.911   17.415   1.00 32.59
ATOM   1078  CG1 VAL   349      55.837   10.678   17.838   1.00 33.68
ATOM   1079  CG2 VAL   349      57.474   12.378   17.103   1.00 32.30
ATOM   1080  C   VAL   349      57.931    9.094   19.050   1.00 34.91
ATOM   1081  O   VAL   349      57.133    8.932   19.980   1.00 33.73
ATOM   1082  N   SER   350      58.551    8.081   18.444   1.00 32.81
ATOM   1083  CA  SER   350      58.335    6.704   18.853   1.00 30.10
ATOM   1084  CB  SER   350      59.041    5.746   17.904   1.00 24.95
ATOM   1085  OG  SER   350      58.943    4.417   18.387   1.00 23.16
ATOM   1086  C   SER   350      58.863    6.486   20.266   1.00 31.59
ATOM   1087  O   SER   350      58.207    5.845   21.086   1.00 37.62
ATOM   1088  N   ASP   351      60.055    7.007   20.546   1.00 28.60
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ATOM   1089  CA  ASP  351      60.652   6.863  21.867  1.00 29.82
ATOM   1090  CB  ASP  351      62.048   7.491  21.919  1.00 27.49
ATOM   1091  CG  ASP  351      63.030   6.806  21.000  1.00 30.22
ATOM   1092  OD1 ASP  351      63.411   7.412  19.974  1.00 32.61
ATOM   1093  OD2 ASP  351      63.422   5.661  21.301  1.00 30.02
ATOM   1094  C.  ASP  351      59.785   7.548  22.913  1.00 30.63
ATOM   1095  O   ASP  351      59.632   7.055  24.027  1.00 29.54
ATOM   1096  N   ALA  352      59.222   8.692  22.537  1.00 25.33
ATOM   1097  CA  ALA  352      58.390   9.464  23.432  1.00 28.59
ATOM   1098  CB  ALA  352      58.011  10.798  22.788  1.00 20.95
ATOM   1099  C   ALA  352      57.136   8.695  23.831  1.00 29.69
ATOM   1100  O   ALA  352      56.711   8.753  24.982  1.00 30.36
ATOM   1101  N   ILE  353      56.557   7.979  22.876  1.00 27.63
ATOM   1102  CA  ILE  353      55.345   7.227  23.129  1.00 27.55
ATOM   1103  CB  ILE  353      54.611   6.925  21.805  1.00 28.04
ATOM   1104  CG2 ILE  353      53.329   6.111  22.065  1.00 23.68
ATOM   1105  CG1 ILE  353      54.269   8.251  21.119  1.00 27.33
ATOM   1106  CD1 ILE  353      53.637   8.105  19.734  1.00 26.23
ATOM   1107  C   ILE  353      55.631   5.943  23.901  1.00 30.88
ATOM   1108  O   ILE  353      54.880   5.597  24.814  1.00 31.22
ATOM   1109  N   PHE  354      56.710   5.240  23.549  1.00 29.86
ATOM   1110  CA  PHE  354      57.056   4.022  24.275  1.00 31.08
ATOM   1111  CB  PHE  354      58.227   3.274  23.619  1.00 28.80
ATOM   1112  CG  PHE  354      57.799   2.322  22.523  1.00 28.80
ATOM   1113  CD1 PHE  354      57.330   2.804  21.292  1.00 30.96
ATOM   1114  CD2 PHE  354      57.811   0.939  22.749  1.00 29.45
ATOM   1115  CE1 PHE  354      56.864   1.909  20.281  1.00 27.12
ATOM   1116  CE2 PHE  354      57.354   0.026  21.761  1.00 25.19
ATOM   1117  CZ  PHE  354      56.879   0.518  20.521  1.00 28.09
ATOM   1118  C   PHE  354      57.398   4.349  25.721  1.00 29.17
ATOM   1119  O   PHE  354      57.001   3.625  26.631  1.00 32.62
ATOM   1120  N   ASP  355      58.133   5.438  25.925  1.00 23.86
ATOM   1121  CA  ASP  355      58.508   5.873  27.262  1.00 25.34
ATOM   1122  CB  ASP  355      59.434   7.083  27.180  1.00 21.41
ATOM   1123  CG  ASP  355      60.846   6.708  26.769  1.00 32.08
ATOM   1124  OD1 ASP  355      61.051   5.595  26.226  1.00 33.58
ATOM   1125  OD2 ASP  355      61.756   7.534  26.970  1.00 33.20
ATOM   1126  C   ASP  355      57.254   6.211  28.062  1.00 27.86
ATOM   1127  O   ASP  355      57.167   5.916  29.252  1.00 32.42
ATOM   1128  N   LEU  356      56.276   6.821  27.401  1.00 26.84
ATOM   1129  CA  LEU  356      55.031   7.164  28.066  1.00 28.66
ATOM   1130  CB  LEU  356      54.112   7.953  27.131  1.00 25.37
ATOM   1131  CG  LEU  356      52.787   8.427  27.742  1.00 27.61
ATOM   1132  CD1 LEU  356      53.056   9.452  28.842  1.00 25.43
ATOM   1133  CD2 LEU  356      51.924   9.057  26.667  1.00 27.49
ATOM   1134  C   LEU  356      54.334   5.875  28.473  1.00 30.44
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ATOM   1135 O   LEU   356    53.873  5.743 29.601 1.00 31.55
ATOM   1136 N   GLY   357    54.266  4.928 27.536 1.00 32.69
ATOM   1137 CA  GLY   357    53.621  3.652 27.787 1.00 29.87
ATOM   1138 C   GLY   357    54.239  2.884 28.939 1.00 33.12
ATOM   1139 O   GLY   357    53.524  2.268 29.732 1.00 29.41
ATOM   1140 N-  MET   358    55.570  2.911 29.026 1.00 33.31
ATOM   1141 CA  MET   358    56.277  2.217 30.100 1.00 35.87
ATOM   1142 CB  MET   358    57.794  2.265 29.871 1.00 34.56
ATOM   1143 CG  MET   358    58.265  1.608 28.576 1.00 46.43
ATOM   1144 SD  MET   358    60.073  1.600 28.351 1.00 42.13
ATOM   1145 CE  MET   358    60.429  3.306 28.411 1.00 44.29
ATOM   1146 C   MET   358    55.948  2.884 31.434 1.00 33.26
ATOM   1147 O   MET   358    55.802  2.222 32.453 1.00 36.39
ATOM   1148 N   SER   359    55.825  4.202 31.398 1.00 33.31
ATOM   1149 CA  SER   359    55.533  4.998 32.580 1.00 34.39
ATOM   1150 CB  SER   359    55.859  6.463 32.303 1.00 30.84
ATOM   1151 OG  SER   359    55.487  7.265 33.404 1.00 47.14
ATOM   1152 C   SER   359    54.094  4.897 33.072 1.00 36.43
ATOM   1153 O   SER   359    53.833  5.073 34.260 1.00 35.46
ATOM   1154 N   LEU   360    53.165  4.617 32.156 1.00 36.74
ATOM   1155 CA  LEU   360    51.750  4.519 32.493 1.00 35.44
ATOM   1156 CB  LEU   360    50.889  4.817 31.263 1.00 34.16
ATOM   1157 CG  LEU   360    50.896  6.263 30.751 1.00 34.59
ATOM   1158 CD1 LEU   360    50.031  6.353 29.513 1.00 33.53
ATOM   1159 CD2 LEU   360    50.376  7.211 31.836 1.00 31.69
ATOM   1160 C   LEU   360    51.324  3.192 33.088 1.00 38.72
ATOM   1161 O   LEU   360    50.185  3.058 33.546 1.00 38.29
ATOM   1162 N   SER   361    52.227  2.214 33.080 1.00 40.96
ATOM   1163 CA  SER   361    51.938  0.897 33.636 1.00 45.67
ATOM   1164 CB  SER   361    53.131 -0.044 33.436 1.00 46.45
ATOM   1165 OG  SER   361    53.362 -0.296 32.061 1.00 51.81
ATOM   1166 C   SER   361    51.628  1.004 35.124 1.00 44.49
ATOM   1167 O   SER   361    50.724  0.337 35.630 1.00 46.67
ATOM   1168 N   SER   362    52.385  1.858 35.809 1.00 41.44
ATOM   1169 CA  SER   362    52.231  2.081 37.245 1.00 42.13
ATOM   1170 CB  SER   362    53.431  2.876 37.779 1.00 42.61
ATOM   1171 OG  SER   362    54.647  2.215 37.492 1.00 51.87
ATOM   1172 C   SER   362    50.951  2.832 37.610 1.00 38.41
ATOM   1173 O   SER   362    50.444  2.700 38.722 1.00 38.01
ATOM   1174 N   PHE   363    50.443  3.631 36.672 1.00 34.55
ATOM   1175 CA  PHE   363    49.232  4.404 36.906 1.00 32.96
ATOM   1176 CB  PHE   363    49.109  5.518 35.859 1.00 31.99
ATOM   1177 CG  PHE   363    50.093  6.659 36.058 1.00 29.97
ATOM   1178 CD1 PHE   363    49.667  7.872 36.594 1.00 30.61
ATOM   1179 CD2 PHE   363    51.445  6.501 35.731 1.00 32.02
ATOM   1180 CE1 PHE   363    50.579  8.940 36.803 1.00 33.67
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ATOM   1181  CE2 PHE   363      52.376   7.552  35.934  1.00 30.91
ATOM   1182  CZ  PHE   363      51.938   8.777  36.473  1.00 29.33
ATOM   1183  C   PHE   363      47.973   3.554  36.916  1.00 30.52
ATOM   1184  O   PHE   363      46.971   3.947  37.491  1.00 32.19
ATOM   1185  N   ASN   364      48.036   2.384  36.283  1.00 33.51
ATOM   1186  CA  ASN   364      46.894   1.471  36.216  1.00 38.03
ATOM   1187  CB  ASN   364      46.754   0.711  37.539  1.00 42.32
ATOM   1188  CG  ASN   364      47.824  -0.361  37.713  1.00 53.11
ATOM   1189  OD1 ASN   364      47.815  -1.370  37.012  1.00 59.51
ATOM   1190  ND2 ASN   364      48.751  -0.138  38.639  1.00 55.95
ATOM   1191  C   ASN   364      45.574   2.161  35.871  1.00 31.89
ATOM   1192  O   ASN   364      44.587   2.027  36.588  1.00 30.28
ATOM   1193  N   LEU   365      45.561   2.883  34.751  1.00 27.62
ATOM   1194  CA  LEU   365      44.365   3.606  34.317  1.00 29.36
ATOM   1195  CB  LEU   365      44.738   4.627  33.240  1.00 27.54
ATOM   1196  CG  LEU   365      45.826   5.659  33.576  1.00 38.91
ATOM   1197  CD1 LEU   365      46.115   6.499  32.338  1.00 34.47
ATOM   1198  CD2 LEU   365      45.394   6.546  34.743  1.00 34.24
ATOM   1199  C   LEU   365      43.264   2.691  33.774  1.00 26.23
ATOM   1200  O   LEU   365      43.546   1.648  33.197  1.00 27.06
ATOM   1201  N   ASP   366      42.011   3.074  33.991  1.00 25.23
ATOM   1202  CA  ASP   366      40.892   2.307  33.462  1.00 26.07
ATOM   1203  CB  ASP   366      39.832   2.008  34.538  1.00 29.68
ATOM   1204  CG  ASP   366      39.337   3.253  35.261  1.00 35.74
ATOM   1205  OD1 ASP   366      39.438   4.371  34.717  1.00 36.78
ATOM   1206  OD2 ASP   366      38.803   3.100  36.378  1.00 41.23
ATOM   1207  C   ASP   366      40.274   3.100  32.305  1.00 27.70
ATOM   1208  O   ASP   366      40.748   4.191  31.975  1.00 31.94
ATOM   1209  N   ASP   367      39.223   2.564  31.693  1.00 29.18
ATOM   1210  CA  ASP   367      38.594   3.233  30.560  1.00 32.72
ATOM   1211  CB  ASP   367      37.428   2.395  30.018  1.00 38.04
ATOM   1212  CG  ASP   367      37.855   0.995  29.606  1.00 42.43
ATOM   1213  OD1 ASP   367      38.913   0.852  28.956  1.00 35.95
ATOM   1214  OD2 ASP   367      37.115   0.034  29.917  1.00 51.42
ATOM   1215  C   ASP   367      38.093   4.631  30.881  1.00 33.71
ATOM   1216  O   ASP   367      38.059   5.506  30.013  1.00 38.30
ATOM   1217  N   THR   368      37.705   4.852  32.132  1.00 31.06
ATOM   1218  CA  THR   368      37.199   6.155  32.543  1.00 26.28
ATOM   1219  CB  THR   368      36.537   6.066  33.922  1.00 27.30
ATOM   1220  OG1 THR   368      35.461   5.127  33.861  1.00 33.42
ATOM   1221  CG2 THR   368      36.003   7.423  34.355  1.00 25.16
ATOM   1222  C   THR   368      38.303   7.194  32.593  1.00 21.13
ATOM   1223  O   THR   368      38.133   8.314  32.104  1.00 23.17
ATOM   1224  N   GLU   369      39.431   6.816  33.179  1.00 21.32
ATOM   1225  CA  GLU   369      40.565   7.720  33.317  1.00 28.00
ATOM   1226  CB  GLU   369      41.582   7.107  34.277  1.00 32.79
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ATOM  1227  CG  GLU  369    40.944   6.804  35.619  1.00 36.29
ATOM  1228  CD  GLU  369    41.834   6.026  36.546  1.00 41.03
ATOM  1229  OE1 GLU  369    42.361   4.967  36.123  1.00 42.05
ATOM  1230  OE2 GLU  369    41.986   6.458  37.705  1.00 42.03
ATOM  1231  C   GLU  369    41.201   8.047  31.970  1.00 25.57
ATOM  1232  O   GLU  369    41.626   9.175  31.741  1.00 20.56
ATOM  1233  N   VAL  370    41.249   7.055  31.080  1.00 25.39
ATOM  1234  CA  VAL  370    41.794   7.278  29.745  1.00 25.99
ATOM  1235  CB  VAL  370    42.005   5.936  28.977  1.00 26.15
ATOM  1236  CG1 VAL  370    42.450   6.216  27.539  1.00 27.65
ATOM  1237  CG2 VAL  370    43.056   5.086  29.685  1.00 17.70
ATOM  1238  C   VAL  370    40.814   8.164  28.966  1.00 26.49
ATOM  1239  O   VAL  370    41.226   9.038  28.202  1.00 28.16
ATOM  1240  N   ALA  371    39.514   7.950  29.184  1.00 21.01
ATOM  1241  CA  ALA  371    38.486   8.730  28.510  1.00 19.57
ATOM  1242  CB  ALA  371    37.116   8.136  28.783  1.00 18.62
ATOM  1243  C   ALA  371    38.512  10.191  28.947  1.00 23.48
ATOM  1244  O   ALA  371    38.500  11.103  28.111  1.00 32.67
ATOM  1245  N   LEU  372    38.540  10.414  30.256  1.00 22.89
ATOM  1246  CA  LEU  372    38.560  11.772  30.806  1.00 23.28
ATOM  1247  CB  LEU  372    38.517  11.709  32.343  1.00 27.76
ATOM  1248  CG  LEU  372    37.155  11.306  32.924  1.00 21.18
ATOM  1249  CD1 LEU  372    37.289  10.891  34.381  1.00 27.64
ATOM  1250  CD2 LEU  372    36.197  12.480  32.763  1.00 20.90
ATOM  1251  C   LEU  372    39.804  12.505  30.357  1.00 21.34
ATOM  1252  O   LEU  372    39.779  13.708  30.086  1.00 23.16
ATOM  1253  N   LEU  373    40.896  11.761  30.276  1.00 24.42
ATOM  1254  CA  LEU  373    42.177  12.302  29.855  1.00 23.78
ATOM  1255  CB  LEU  373    43.222  11.205  30.007  1.00 22.18
ATOM  1256  CG  LEU  373    44.724  11.456  30.036  1.00 31.52
ATOM  1257  CD1 LEU  373    45.099  12.565  31.001  1.00 31.93
ATOM  1258  CD2 LEU  373    45.382  10.152  30.460  1.00 30.24
ATOM  1259  C   LEU  373    42.025  12.757  28.399  1.00 25.69
ATOM  1260  O   LEU  373    42.469  13.842  28.025  1.00 30.13
ATOM  1261  N   GLN  374    41.370  11.934  27.587  1.00 26.24
ATOM  1262  CA  GLN  374    41.151  12.269  26.184  1.00 21.60
ATOM  1263  CB  GLN  374    40.501  11.091  25.444  1.00 24.57
ATOM  1264  CG  GLN  374    41.428   9.900  25.234  1.00 21.02
ATOM  1265  CD  GLN  374    40.762   8.744  24.501  1.00 22.86
ATOM  1266  OE1 GLN  374    41.407   7.754  24.174  1.00 24.07
ATOM  1267  NE2 GLN  374    39.466   8.865  24.249  1.00 25.59
ATOM  1268  C   GLN  374    40.267  13.498  26.070  1.00 20.66
ATOM  1269  O   GLN  374    40.518  14.366  25.242  1.00 24.47
ATOM  1270  N   ALA  375    39.237  13.579  26.902  1.00 16.26
ATOM  1271  CA  ALA  375    38.337  14.727  26.870  1.00 17.16
ATOM  1272  CB  ALA  375    37.156  14.491  27.803  1.00 19.53
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ATOM   1273  C   ALA   375    39.056  16.024  27.252  1.00 25.13
ATOM   1274  O   ALA   375    38.722  17.100  26.750  1.00 23.81
ATOM   1275  N   VAL   376    40.036  15.926  28.156  1.00 24.57
ATOM   1276  CA  VAL   376    40.796  17.101  28.568  1.00 25.80
ATOM   1277  CB  VAL   376    41.711  16.792  29.814  1.00 26.48
ATOM   1278  CG1 VAL   376    42.625  17.971  30.102  1.00 23.20
ATOM   1279  CG2 VAL   376    40.845  16.521  31.044  1.00 19.08
ATOM   1280  C   VAL   376    41.653  17.580  27.396  1.00 25.69
ATOM   1281  O   VAL   376    41.775  18.780  27.151  1.00 27.87
ATOM   1282  N   LEU   377    42.249  16.637  26.666  1.00 23.09
ATOM   1283  CA  LEU   377    43.071  16.982  25.513  1.00 22.86
ATOM   1284  CB  LEU   377    43.748  15.730  24.962  1.00 18.50
ATOM   1285  CG  LEU   377    44.814  15.096  25.867  1.00 22.65
ATOM   1286  CD1 LEU   377    45.144  13.708  25.374  1.00 16.70
ATOM   1287  CD2 LEU   377    46.070  15.987  25.901  1.00 19.58
ATOM   1288  C   LEU   377    42.197  17.634  24.430  1.00 26.14
ATOM   1289  O   LEU   377    42.579  18.638  23.830  1.00 20.62
ATOM   1290  N   LEU   378    41.016  17.057  24.208  1.00 28.99
ATOM   1291  CA  LEU   378    40.076  17.578  23.218  1.00 28.87
ATOM   1292  CB  LEU   378    38.814  16.710  23.182  1.00 26.89
ATOM   1293  CG  LEU   378    37.637  17.167  22.311  1.00 28.83
ATOM   1294  CD1 LEU   378    38.053  17.273  20.840  1.00 27.97
ATOM   1295  CD2 LEU   378    36.496  16.175  22.478  1.00 27.69
ATOM   1296  C   LEU   378    39.693  19.025  23.504  1.00 31.09
ATOM   1297  O   LEU   378    39.812  19.883  22.629  1.00 31.77
ATOM   1298  N   MET   379    39.247  19.297  24.729  1.00 31.44
ATOM   1299  CA  MET   379    38.841  20.649  25.104  1.00 32.62
ATOM   1300  CB  MET   379    37.876  20.603  26.293  1.00 31.45
ATOM   1301  CG  MET   379    36.586  19.855  26.010  1.00 38.75
ATOM   1302  SD  MET   379    35.646  20.541  24.601  1.00 41.27
ATOM   1303  CE  MET   379    34.231  19.443  24.609  1.00 35.68
ATOM   1304  C   MET   379    39.980  21.613  25.421  1.00 33.72
ATOM   1305  O   MET   379    39.940  22.297  26.446  1.00 36.29
ATOM   1306  N   SER   380    40.981  21.676  24.543  1.00 34.49
ATOM   1307  CA  SER   380    42.116  22.585  24.721  1.00 33.97
ATOM   1308  CB  SER   380    43.371  22.025  24.061  1.00 31.24
ATOM   1309  OG  SER   380    43.771  20.814  24.674  1.00 39.42
ATOM   1310  C   SER   380    41.772  23.926  24.088  1.00 39.69
ATOM   1311  O   SER   380    41.787  24.069  22.864  1.00 44.64
ATOM   1312  N   SER   381    41.472  24.907  24.927  1.00 41.04
ATOM   1313  CA  SER   381    41.090  26.234  24.462  1.00 44.91
ATOM   1314  CB  SER   381    40.406  27.004  25.594  1.00 44.50
ATOM   1315  OG  SER   381    41.294  27.177  26.678  1.00 45.42
ATOM   1316  C   SER   381    42.231  27.084  23.921  1.00 44.59
ATOM   1317  O   SER   381    42.012  28.227  23.516  1.00 49.32
ATOM   1318  N   ASP   382    43.440  26.541  23.896  1.00 43.75
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ATOM   1319  CA  ASP   382      44.571  27.315  23.407  1.00 43.93
ATOM   1320  CB  ASP   382      45.817  27.047  24.257  1.00 48.39
ATOM   1321  CG  ASP   382      46.319  25.632  24.113  1.00 53.23
ATOM   1322  OD1 ASP   382      45.590  24.702  24.517  1.00 56.97
ATOM   1323  OD2 ASP   382      47.440  25.449  23.584  1.00 58.91
ATOM   1324  C.  ASP   382      44.900  27.026  21.955  1.00 41.09
ATOM   1325  O   ASP   382      45.912  27.502  21.446  1.00 40.93
ATOM   1326  N   ARG   383      44.068  26.236  21.287  1.00 42.63
ATOM   1327  CA  ARG   383      44.316  25.937  19.876  1.00 43.32
ATOM   1328  CB  ARG   383      43.289  24.935  19.331  1.00 42.31
ATOM   1329  CG  ARG   383      43.174  23.619  20.095  1.00 40.83
ATOM   1330  CD  ARG   383      44.478  22.835  20.139  1.00 38.09
ATOM   1331  NE  ARG   383      44.271  21.542  20.787  1.00 37.33
ATOM   1332  CZ  ARG   383      45.235  20.690  21.115  1.00 38.35
ATOM   1333  NH1 ARG   383      46.505  20.972  20.850  1.00 33.70
ATOM   1334  NH2 ARG   383      44.922  19.545  21.704  1.00 35.46
ATOM   1335  C   ARG   383      44.166  27.256  19.127  1.00 44.96
ATOM   1336  O   ARG   383      43.214  28.006  19.361  1.00 45.60
ATOM   1337  N   PRO   384      45.112  27.574  18.230  1.00 45.33
ATOM   1338  CD  PRO   384      46.330  26.852  17.836  1.00 46.85
ATOM   1339  CA  PRO   384      45.024  28.830  17.484  1.00 47.37
ATOM   1340  CB  PRO   384      46.323  28.823  16.672  1.00 46.90
ATOM   1341  CG  PRO   384      47.257  27.998  17.552  1.00 46.41
ATOM   1342  C   PRO   384      43.788  28.910  16.590  1.00 48.29
ATOM   1343  O   PRO   384      43.394  27.927  15.960  1.00 48.34
ATOM   1344  N   GLY   385      43.176  30.090  16.552  1.00 49.88
ATOM   1345  CA  GLY   385      42.013  30.290  15.712  1.00 50.35
ATOM   1346  C   GLY   385      40.669  29.958  16.324  1.00 50.70
ATOM   1347  O   GLY   385      39.639  30.201  15.697  1.00 53.48
ATOM   1348  N   LEU   386      40.663  29.404  17.529  1.00 49.04
ATOM   1349  CA  LEU   386      39.405  29.057  18.182  1.00 50.53
ATOM   1350  CB  LEU   386      39.655  28.433  19.558  1.00 45.17
ATOM   1351  CG  LEU   386      40.245  27.019  19.544  1.00 48.26
ATOM   1352  CD1 LEU   386      40.502  26.564  20.970  1.00 41.68
ATOM   1353  CD2 LEU   386      39.285  26.065  18.836  1.00 38.40
ATOM   1354  C   LEU   386      38.495  30.268  18.319  1.00 52.13
ATOM   1355  O   LEU   386      38.955  31.395  18.476  1.00 53.67
ATOM   1356  N   ALA   387      37.193  30.020  18.261  1.00 53.42
ATOM   1357  CA  ALA   387      36.225  31.093  18.354  1.00 56.01
ATOM   1358  CB  ALA   387      35.221  30.976  17.202  1.00 56.47
ATOM   1359  C   ALA   387      35.482  31.144  19.681  1.00 55.52
ATOM   1360  O   ALA   387      35.491  32.171  20.358  1.00 53.75
ATOM   1361  N   CYS   388      34.854  30.038  20.065  1.00 56.03
ATOM   1362  CA  CYS   388      34.072  30.036  21.312  1.00 59.57
ATOM   1363  CB  CYS   388      32.724  29.351  21.089  1.00 59.23
ATOM   1364  SG  CYS   388      31.314  30.363  21.641  1.00 58.64
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ATOM   1365  C   CYS   388      34.846  29.289  22.398  1.00 62.18
ATOM   1366  O   CYS   388      34.458  28.190  22.790  1.00 67.88
ATOM   1367  N   VAL   389      35.955  29.950  22.760  1.00 60.78
ATOM   1368  CA  VAL   389      37.005  29.583  23.713  1.00 57.70
ATOM   1369  CB  VAL   389      38.202  30.580  23.565  1.00 57.09
ATOM   1370  CG1 VAL   389      39.351  30.194  24.494  1.00 59.03
ATOM   1371  CG2 VAL   389      38.671  30.618  22.124  1.00 53.98
ATOM   1372  C   VAL   389      36.661  29.515  25.195  1.00 57.77
ATOM   1373  O   VAL   389      36.943  28.513  25.851  1.00 60.94
ATOM   1374  N   GLU   390      36.102  30.594  25.732  1.00 52.68
ATOM   1375  CA  GLU   390      35.738  30.636  27.138  1.00 48.41
ATOM   1376  CB  GLU   390      35.001  31.928  27.451  1.00 45.19
ATOM   1377  C   GLU   390      34.868  29.439  27.459  1.00 47.63
ATOM   1378  O   GLU   390      34.986  28.837  28.529  1.00 51.95
ATOM   1379  N   ARG   391      34.002  29.082  26.517  1.00 47.11
ATOM   1380  CA  ARG   391      33.099  27.950  26.699  1.00 51.64
ATOM   1381  CB  ARG   391      32.050  27.930  25.588  1.00 54.22
ATOM   1382  CG  ARG   391      30.830  27.094  25.915  1.00 64.20
ATOM   1383  CD  ARG   391      29.867  27.074  24.748  1.00 73.80
ATOM   1384  NE  ARG   391      28.533  26.622  25.128  1.00 79.76
ATOM   1385  CZ  ARG   391      27.714  27.298  25.929  1.00 84.27
ATOM   1386  NH1 ARG   391      28.090  28.465  26.439  1.00 85.28
ATOM   1387  NH2 ARG   391      26.515  26.809  26.217  1.00 86.84
ATOM   1388  C   ARG   391      33.890  26.644  26.684  1.00 48.18
ATOM   1389  O   ARG   391      33.504  25.671  27.330  1.00 49.57
ATOM   1390  N   ILE   392      34.987  26.625  25.936  1.00 45.01
ATOM   1391  CA  ILE   392      35.835  25.440  25.858  1.00 48.77
ATOM   1392  CB  ILE   392      36.854  25.565  24.692  1.00 46.45
ATOM   1393  CG2 ILE   392      37.798  24.370  24.679  1.00 42.35
ATOM   1394  CG1 ILE   392      36.086  25.664  23.367  1.00 49.69
ATOM   1395  CD1 ILE   392      36.950  25.897  22.136  1.00 51.09
ATOM   1396  C   ILE   392      36.570  25.246  27.192  1.00 50.90
ATOM   1397  O   ILE   392      36.731  24.118  27.657  1.00 52.21
ATOM   1398  N   GLU   393      36.999  26.346  27.811  1.00 50.43
ATOM   1399  CA  GLU   393      37.673  26.267  29.101  1.00 50.30
ATOM   1400  CB  GLU   393      38.202  27.638  29.531  1.00 53.97
ATOM   1401  CG  GLU   393      39.322  28.168  28.658  1.00 62.18
ATOM   1402  CD  GLU   393      39.911  29.478  29.168  1.00 67.69
ATOM   1403  OE1 GLU   393      40.869  29.977  28.537  1.00 66.42
ATOM   1404  OE2 GLU   393      39.423  30.009  30.191  1.00 70.64
ATOM   1405  C   GLU   393      36.686  25.765  30.145  1.00 49.31
ATOM   1406  O   GLU   393      37.018  24.923  30.980  1.00 49.53
ATOM   1407  N   LYS   394      35.468  26.286  30.090  1.00 46.07
ATOM   1408  CA  LYS   394      34.428  25.893  31.022  1.00 45.76
ATOM   1409  CB  LYS   394      33.147  26.666  30.727  1.00 43.85
ATOM   1410  C   LYS   394      34.188  24.391  30.909  1.00 46.69
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ATOM   1411  O   LYS   394      33.982 23.699 31.911  1.00 49.13
ATOM   1412  N   TYR   395      34.223 23.887 29.679  1.00 46.57
ATOM   1413  CA  TYR   395      34.014 22.467 29.427  1.00 43.33
ATOM   1414  CB  TYR   395      33.818 22.211 27.929  1.00 48.44
ATOM   1415  CG  TYR   395      32.493 22.710 27.335  1.00 53.83
ATOM   1416  CD1 TYR   395      32.302 22.727 25.947  1.00 56.43
ATOM   1417  CE1 TYR   395      31.078 23.148 25.374  1.00 59.73
ATOM   1418  CD2 TYR   395      31.434 23.132 28.153  1.00 56.47
ATOM   1419  CE2 TYR   395      30.198 23.559 27.592  1.00 62.60
ATOM   1420  CZ  TYR   395      30.037 23.562 26.200  1.00 63.18
ATOM   1421  OH  TYR   395      28.834 23.962 25.635  1.00 64.46
ATOM   1422  C   TYR   395      35.189 21.635 29.938  1.00 37.30
ATOM   1423  O   TYR   395      34.993 20.599 30.564  1.00 34.10
ATOM   1424  N   GLN   396      36.408 22.091 29.671  1.00 31.92
ATOM   1425  CA  GLN   396      37.584 21.363 30.120  1.00 34.81
ATOM   1426  CB  GLN   396      38.861 21.987 29.560  1.00 32.64
ATOM   1427  CG  GLN   396      40.114 21.183 29.882  1.00 29.57
ATOM   1428  CD  GLN   396      41.370 21.827 29.352  1.00 29.46
ATOM   1429  OE1 GLN   396      41.648 22.982 29.649  1.00 34.65
ATOM   1430  NE2 GLN   396      42.139 21.088 28.570  1.00 27.21
ATOM   1431  C   GLN   396      37.647 21.342 31.647  1.00 37.13
ATOM   1432  O   GLN   396      37.939 20.302 32.236  1.00 37.36
ATOM   1433  N   ASP   397      37.371 22.484 32.284  1.00 38.61
ATOM   1434  CA  ASP   397      37.393 22.555 33.742  1.00 40.37
ATOM   1435  CB  ASP   397      37.099 23.973 34.240  1.00 40.51
ATOM   1436  CG  ASP   397      38.130 24.974 33.772  1.00 43.77
ATOM   1437  OD1 ASP   397      39.330 24.632 33.775  1.00 46.50
ATOM   1438  OD2 ASP   397      37.750 26.109 33.422  1.00 51.34
ATOM   1439  C   ASP   397      36.352 21.601 34.295  1.00 38.62
ATOM   1440  O   ASP   397      36.515 21.034 35.372  1.00 39.20
ATOM   1441  N   SER   398      35.282 21.423 33.540  1.00 37.84
ATOM   1442  CA  SER   398      34.221 20.524 33.942  1.00 37.80
ATOM   1443  CB  SER   398      33.039 20.669 32.984  1.00 34.28
ATOM   1444  OG  SER   398      31.981 19.815 33.360  1.00 46.60
ATOM   1445  C   SER   398      34.752 19.082 33.939  1.00 38.41
ATOM   1446  O   SER   398      34.372 18.274 34.787  1.00 39.98
ATOM   1447  N   PHE   399      35.630 18.772 32.987  1.00 34.82
ATOM   1448  CA  PHE   399      36.213 17.433 32.885  1.00 35.96
ATOM   1449  CB  PHE   399      36.809 17.181 31.493  1.00 35.75
ATOM   1450  CG  PHE   399      35.775 16.936 30.419  1.00 39.30
ATOM   1451  CD1 PHE   399      35.640 17.826 29.344  1.00 39.86
ATOM   1452  CD2 PHE   399      34.936 15.819 30.487  1.00 36.81
ATOM   1453  CE1 PHE   399      34.674 17.607 28.330  1.00 41.25
ATOM   1454  CE2 PHE   399      33.962 15.577 29.488  1.00 43.61
ATOM   1455  CZ  PHE   399      33.829 16.480 28.402  1.00 40.34
ATOM   1456  C   PHE   399      37.306 17.217 33.921  1.00 33.48
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ATOM	1457	O	PHE	399	37.406	16.139	34.512	1.00	26.86
ATOM	1458	N	LEU	400	38.132	18.239	34.118	1.00	31.47
ATOM	1459	CA	LEU	400	39.213	18.162	35.086	1.00	37.41
ATOM	1460	CB	LEU	400	40.051	19.441	35.038	1.00	34.24
ATOM	1461	CG	LEU	400	40.934	19.574	33.788	1.00	35.10
ATOM	1462	CD1	LEU	400	41.469	20.991	33.651	1.00	26.60
ATOM	1463	CD2	LEU	400	42.077	18.569	33.884	1.00	29.44
ATOM	1464	C	LEU	400	38.666	17.931	36.491	1.00	38.84
ATOM	1465	O	LEU	400	39.137	17.049	37.205	1.00	40.38
ATOM	1466	N	LEU	401	37.654	18.703	36.870	1.00	42.79
ATOM	1467	CA	LEU	401	37.056	18.584	38.197	1.00	43.48
ATOM	1468	CB	LEU	401	35.997	19.675	38.406	1.00	44.73
ATOM	1469	CG	LEU	401	35.322	19.737	39.779	1.00	51.39
ATOM	1470	CD1	LEU	401	36.359	20.002	40.866	1.00	50.11
ATOM	1471	CD2	LEU	401	34.273	20.834	39.778	1.00	49.30
ATOM	1472	C	LEU	401	36.433	17.215	38.409	1.00	41.62
ATOM	1473	O	LEU	401	36.563	16.622	39.482	1.00	45.14
ATOM	1474	N	ALA	402	35.744	16.712	37.389	1.00	37.92
ATOM	1475	CA	ALA	402	35.115	15.402	37.484	1.00	29.90
ATOM	1476	CB	ALA	402	34.196	15.187	36.297	1.00	30.70
ATOM	1477	C	ALA	402	36.203	14.336	37.508	1.00	28.88
ATOM	1478	O	ALA	402	36.083	13.322	38.188	1.00	32.14
ATOM	1479	N	PHE	403	37.274	14.588	36.764	1.00	31.07
ATOM	1480	CA	PHE	403	38.402	13.656	36.661	1.00	29.90
ATOM	1481	CB	PHE	403	39.396	14.178	35.605	1.00	27.03
ATOM	1482	CG	PHE	403	40.434	13.146	35.140	1.00	26.97
ATOM	1483	CD1	PHE	403	41.362	13.509	34.149	1.00	25.55
ATOM	1484	CD2	PHE	403	40.475	11.841	35.664	1.00	19.75
ATOM	1485	CE1	PHE	403	42.331	12.588	33.679	1.00	27.90
ATOM	1486	CE2	PHE	403	41.441	10.899	35.206	1.00	22.56
ATOM	1487	CZ	PHE	403	42.371	11.273	34.210	1.00	22.24
ATOM	1488	C	PHE	403	39.081	13.523	38.023	1.00	28.82
ATOM	1489	O	PHE	403	39.313	12.413	38.495	1.00	26.00
ATOM	1490	N	GLU	404	39.405	14.652	38.652	1.00	30.25
ATOM	1491	CA	GLU	404	40.039	14.627	39.966	1.00	34.03
ATOM	1492	CB	GLU	404	40.264	16.046	40.497	1.00	39.45
ATOM	1493	CG	GLU	404	40.987	16.076	41.839	1.00	47.68
ATOM	1494	CD	GLU	404	41.062	17.465	42.446	1.00	54.02
ATOM	1495	OE1	GLU	404	41.607	18.380	41.796	1.00	57.27
ATOM	1496	OE2	GLU	404	40.573	17.638	43.585	1.00	63.85
ATOM	1497	C	GLU	404	39.164	13.860	40.960	1.00	36.01
ATOM	1498	O	GLU	404	39.661	12.997	41.701	1.00	38.64
ATOM	1499	N	HIS	405	37.870	14.168	40.975	1.00	29.56
ATOM	1500	CA	HIS	405	36.949	13.508	41.892	1.00	31.69
ATOM	1501	CB	HIS	405	35.534	14.077	41.757	1.00	33.75
ATOM	1502	CG	HIS	405	35.401	15.498	42.213	1.00	34.75

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ATOM   1503  CD2 HIS    405    36.308  16.361  42.730  1.00 34.58
ATOM   1504  ND1 HIS    405    34.207  16.187  42.146  1.00 32.43
ATOM   1505  CE1 HIS    405    34.385  17.414  42.598  1.00 36.15
ATOM   1506  NE2 HIS    405    35.650  17.549  42.960  1.00 39.84
ATOM   1507  C   HIS    405    36.904  12.013  41.673  1.00 34.21
ATOM   1508  O   HIS    405    36.700  11.247  42.624  1.00 37.06
ATOM   1509  N   TYR    406    37.081  11.594  40.419  1.00 30.83
ATOM   1510  CA  TYR    406    37.059  10.173  40.093  1.00 28.85
ATOM   1511  CB  TYR    406    37.018   9.959  38.575  1.00 31.48
ATOM   1512  CG  TYR    406    36.879   8.490  38.181  1.00 23.49
ATOM   1513  CD1 TYR    406    35.683   7.798  38.397  1.00 19.42
ATOM   1514  CE1 TYR    406    35.556   6.427  38.059  1.00 23.80
ATOM   1515  CD2 TYR    406    37.950   7.794  37.624  1.00 21.81
ATOM   1516  CE2 TYR    406    37.838   6.421  37.278  1.00 24.64
ATOM   1517  CZ  TYR    406    36.639   5.753  37.503  1.00 21.56
ATOM   1518  OH  TYR    406    36.537   4.404  37.186  1.00 24.96
ATOM   1519  C   TYR    406    38.318   9.526  40.638  1.00 24.24
ATOM   1520  O   TYR    406    38.308   8.375  41.050  1.00 27.08
ATOM   1521  N   ILE    407    39.407  10.278  40.617  1.00 25.76
ATOM   1522  CA  ILE    407    40.688   9.799  41.105  1.00 33.75
ATOM   1523  CB  ILE    407    41.815  10.822  40.796  1.00 34.23
ATOM   1524  CG2 ILE    407    43.121  10.400  41.435  1.00 32.46
ATOM   1525  CG1 ILE    407    41.959  10.972  39.275  1.00 43.30
ATOM   1526  CD1 ILE    407    42.267   9.677  38.523  1.00 40.40
ATOM   1527  C   ILE    407    40.620   9.556  42.613  1.00 39.03
ATOM   1528  O   ILE    407    41.192   8.583  43.107  1.00 35.18
ATOM   1529  N   ASN    408    39.916  10.440  43.335  1.00 37.25
ATOM   1530  CA  ASN    408    39.778  10.292  44.777  1.00 37.01
ATOM   1531  CB  ASN    408    39.099  11.514  45.400  1.00 32.27
ATOM   1532  CG  ASN    408    39.887  12.790  45.187  1.00 33.56
ATOM   1533  OD1 ASN    408    41.118  12.785  45.225  1.00 31.99
ATOM   1534  ND2 ASN    408    39.182  13.903  44.996  1.00 31.23
ATOM   1535  C   ASN    408    38.961   9.046  45.055  1.00 38.14
ATOM   1536  O   ASN    408    39.303   8.243  45.920  1.00 42.16
ATOM   1537  N   TYR    409    37.874   8.894  44.303  1.00 35.62
ATOM   1538  CA  TYR    409    37.002   7.733  44.412  1.00 35.91
ATOM   1539  CB  TYR    409    35.929   7.804  43.323  1.00 34.41
ATOM   1540  CG  TYR    409    35.196   6.495  43.066  1.00 38.73
ATOM   1541  CD1 TYR    409    34.266   5.982  43.980  1.00 41.34
ATOM   1542  CE1 TYR    409    33.600   4.745  43.741  1.00 47.16
ATOM   1543  CD2 TYR    409    35.461   5.752  41.907  1.00 46.20
ATOM   1544  CE2 TYR    409    34.814   4.518  41.651  1.00 50.74
ATOM   1545  CZ  TYR    409    33.891   4.023  42.573  1.00 50.88
ATOM   1546  OH  TYR    409    33.262   2.816  42.302  1.00 53.14
ATOM   1547  C   TYR    409    37.827   6.459  44.240  1.00 38.16
ATOM   1548  O   TYR    409    37.806   5.561  45.082  1.00 41.83
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ATOM	1549	N	ARG	410	38.551	6.399	43.125	1.00	42.25
ATOM	1550	CA	ARG	410	39.410	5.272	42.765	1.00	42.83
ATOM	1551	CB	ARG	410	40.029	5.540	41.392	1.00	36.83
ATOM	1552	CG	ARG	410	39.055	5.397	40.249	1.00	34.32
ATOM	1553	CD	ARG	410	39.134	3.996	39.681	1.00	36.62
ATOM	1554	NE	ARG	410	40.420	3.787	39.013	1.00	38.64
ATOM	1555	CZ	ARG	410	40.832	2.625	38.517	1.00	35.73
ATOM	1556	NH1	ARG	410	40.068	1.548	38.617	1.00	33.17
ATOM	1557	NH2	ARG	410	42.006	2.544	37.916	1.00	32.70
ATOM	1558	C	ARG	410	40.520	5.039	43.780	1.00	46.67
ATOM	1559	O	ARG	410	40.900	3.901	44.053	1.00	41.78
ATOM	1560	N	LYS	411	41.026	6.140	44.325	1.00	52.99
ATOM	1561	CA	LYS	411	42.109	6.141	45.298	1.00	58.32
ATOM	1562	CB	LYS	411	41.565	5.956	46.731	1.00	64.99
ATOM	1563	CG	LYS	411	40.660	4.763	46.977	1.00	70.48
ATOM	1564	CD	LYS	411	40.034	4.866	48.364	1.00	77.18
ATOM	1565	CE	LYS	411	39.053	3.732	48.625	1.00	84.30
ATOM	1566	NZ	LYS	411	38.392	3.865	49.958	1.00	86.48
ATOM	1567	C	LYS	411	43.238	5.163	45.000	1.00	56.66
ATOM	1568	O	LYS	411	43.329	4.075	45.575	1.00	55.47
ATOM	1569	N	HIS	412	44.091	5.582	44.070	1.00	54.67
ATOM	1570	CA	HIS	412	45.266	4.823	43.657	1.00	48.67
ATOM	1571	CB	HIS	412	45.878	5.442	42.393	1.00	43.14
ATOM	1572	CG	HIS	412	45.073	5.218	41.156	1.00	41.36
ATOM	1573	CD2	HIS	412	44.084	5.952	40.584	1.00	35.44
ATOM	1574	ND1	HIS	412	45.220	4.093	40.364	1.00	38.19
ATOM	1575	CE1	HIS	412	44.357	4.150	39.363	1.00	34.75
ATOM	1576	NE2	HIS	412	43.659	5.263	39.474	1.00	35.52
ATOM	1577	C	HIS	412	46.264	4.932	44.793	1.00	46.35
ATOM	1578	O	HIS	412	46.326	5.951	45.479	1.00	42.73
ATOM	1579	N	HIS	413	47.049	3.883	44.993	1.00	48.92
ATOM	1580	CA	HIS	413	48.040	3.903	46.052	1.00	53.15
ATOM	1581	CB	HIS	413	48.148	2.515	46.688	1.00	55.27
ATOM	1582	CG	HIS	413	46.843	2.015	47.238	1.00	58.77
ATOM	1583	CD2	HIS	413	46.138	0.892	46.977	1.00	61.65
ATOM	1584	ND1	HIS	413	46.108	2.726	48.161	1.00	60.31
ATOM	1585	CE1	HIS	413	45.003	2.061	48.445	1.00	63.01
ATOM	1586	NE2	HIS	413	44.993	0.942	47.743	1.00	62.93
ATOM	1587	C	HIS	413	49.359	4.364	45.456	1.00	53.19
ATOM	1588	O	HIS	413	50.335	3.617	45.390	1.00	54.93
ATOM	1589	N	VAL	414	49.343	5.612	44.999	1.00	53.77
ATOM	1590	CA	VAL	414	50.487	6.282	44.389	1.00	51.06
ATOM	1591	CB	VAL	414	50.374	6.305	42.838	1.00	51.49
ATOM	1592	CG1	VAL	414	51.603	6.958	42.231	1.00	45.22
ATOM	1593	CG2	VAL	414	50.210	4.891	42.304	1.00	52.67
ATOM	1594	C	VAL	414	50.444	7.724	44.894	1.00	54.28

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ATOM   1595  O   VAL   414    49.418   8.401  44.774  1.00 55.49
ATOM   1596  N   THR   415    51.547   8.190  45.467  1.00 56.28
ATOM   1597  CA  THR   415    51.610   9.550  45.986  1.00 57.83
ATOM   1598  CB  THR   415    52.874   9.756  46.858  1.00 59.64
ATOM   1599  OG1 THR   415    52.922  11.115  47.311  1.00 66.69
ATOM   1600  CG2 THR   415    54.137   9.436  46.067  1.00 59.42
ATOM   1601  C   THR   415    51.599  10.577  44.855  1.00 56.98
ATOM   1602  O   THR   415    52.176  10.345  43.789  1.00 55.70
ATOM   1603  N   HIS   416    50.936  11.707  45.093  1.00 57.44
ATOM   1604  CA  HIS   416    50.835  12.786  44.108  1.00 57.34
ATOM   1605  CB  HIS   416    52.207  13.425  43.875  1.00 61.35
ATOM   1606  CG  HIS   416    52.860  13.940  45.123  1.00 69.78
ATOM   1607  CD2 HIS   416    54.049  13.633  45.695  1.00 71.42
ATOM   1608  ND1 HIS   416    52.283  14.901  45.922  1.00 72.49
ATOM   1609  CE1 HIS   416    53.087  15.165  46.938  1.00 75.50
ATOM   1610  NE2 HIS   416    54.165  14.410  46.819  1.00 73.91
ATOM   1611  C   HIS   416    50.301  12.260  42.773  1.00 53.79
ATOM   1612  O   HIS   416    50.769  12.667  41.710  1.00 52.81
ATOM   1613  N   PHE   417    49.318  11.366  42.824  1.00 48.05
ATOM   1614  CA  PHE   417    48.769  10.784  41.610  1.00 47.99
ATOM   1615  CB  PHE   417    47.652   9.799  41.940  1.00 46.11
ATOM   1616  CG  PHE   417    47.314   8.868  40.791  1.00 44.27
ATOM   1617  CD1 PHE   417    48.155   7.796  40.481  1.00 41.79
ATOM   1618  CD2 PHE   417    46.179   9.091  40.003  1.00 40.23
ATOM   1619  CE1 PHE   417    47.872   6.936  39.386  1.00 44.30
ATOM   1620  CE2 PHE   417    45.874   8.248  38.907  1.00 36.80
ATOM   1621  CZ  PHE   417    46.725   7.167  38.595  1.00 40.69
ATOM   1622  C   PHE   417    48.227  11.824  40.625  1.00 46.69
ATOM   1623  O   PHE   417    48.551  11.787  39.436  1.00 43.35
ATOM   1624  N   TRP   418    47.410  12.746  41.124  1.00 45.14
ATOM   1625  CA  TRP   418    46.821  13.775  40.276  1.00 44.89
ATOM   1626  CB  TRP   418    45.808  14.604  41.077  1.00 42.24
ATOM   1627  CG  TRP   418    45.096  15.646  40.259  1.00 47.11
ATOM   1628  CD2 TRP   418    44.186  15.417  39.159  1.00 46.98
ATOM   1629  CE2 TRP   418    43.786  16.678  38.676  1.00 48.94
ATOM   1630  CE3 TRP   418    43.676  14.261  38.548  1.00 45.23
ATOM   1631  CD1 TRP   418    45.204  17.003  40.387  1.00 46.24
ATOM   1632  NE1 TRP   418    44.425  17.637  39.448  1.00 50.63
ATOM   1633  CZ2 TRP   418    42.891  16.839  37.598  1.00 45.46
ATOM   1634  CZ3 TRP   418    42.780  14.411  37.468  1.00 44.50
ATOM   1635  CH2 TRP   418    42.403  15.696  37.009  1.00 47.55
ATOM   1636  C   TRP   418    47.862  14.676  39.598  1.00 43.88
ATOM   1637  O   TRP   418    47.834  14.842  38.383  1.00 43.17
ATOM   1638  N   PRO   419    48.788  15.281  40.369  1.00 43.55
ATOM   1639  CD  PRO   419    49.006  15.290  41.826  1.00 41.52
ATOM   1640  CA  PRO   419    49.787  16.135  39.725  1.00 41.48
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ATOM	1641	CB	PRO	419	50.626	16.627	40.912	1.00	39.21
ATOM	1642	CG	PRO	419	49.593	16.667	42.017	1.00	39.25
ATOM	1643	C	PRO	419	50.616	15.363	38.701	1.00	36.28
ATOM	1644	O	PRO	419	50.940	15.882	37.638	1.00	37.08
ATOM	1645	N	LYS	420	50.959	14.124	39.033	1.00	35.96
ATOM	1646	CA	LYS	420	51.742	13.281	38.132	1.00	40.82
ATOM	1647	CB	LYS	420	52.094	11.945	38.792	1.00	40.78
ATOM	1648	CG	LYS	420	53.086	12.046	39.933	1.00	48.62
ATOM	1649	CD	LYS	420	53.391	10.668	40.497	1.00	55.12
ATOM	1650	CE	LYS	420	54.395	10.741	41.635	1.00	53.26
ATOM	1651	NZ	LYS	420	54.719	9.388	42.152	1.00	52.69
ATOM	1652	C	LYS	420	50.957	13.005	36.860	1.00	40.29
ATOM	1653	O	LYS	420	51.516	12.989	35.764	1.00	39.66
ATOM	1654	N	LEU	421	49.658	12.786	37.023	1.00	38.33
ATOM	1655	CA	LEU	421	48.784	12.507	35.903	1.00	37.60
ATOM	1656	CB	LEU	421	47.417	12.074	36.428	1.00	43.66
ATOM	1657	CG	LEU	421	46.386	11.479	35.474	1.00	46.50
ATOM	1658	CD1	LEU	421	46.946	10.253	34.770	1.00	45.15
ATOM	1659	CD2	LEU	421	45.154	11.107	36.279	1.00	51.31
ATOM	1660	C	LEU	421	48.661	13.747	35.014	1.00	39.59
ATOM	1661	O	LEU	421	48.599	13.638	33.791	1.00	40.66
ATOM	1662	N	LEU	422	48.642	14.928	35.623	1.00	39.57
ATOM	1663	CA	LEU	422	48.545	16.170	34.867	1.00	38.63
ATOM	1664	CB	LEU	422	48.313	17.357	35.802	1.00	41.79
ATOM	1665	CG	LEU	422	46.996	17.407	36.581	1.00	42.74
ATOM	1666	CD1	LEU	422	47.010	18.606	37.515	1.00	42.89
ATOM	1667	CD2	LEU	422	45.823	17.494	35.628	1.00	39.27
ATOM	1668	C	LEU	422	49.808	16.410	34.039	1.00	40.47
ATOM	1669	O	LEU	422	49.747	17.029	32.979	1.00	47.83
ATOM	1670	N	MET	423	50.949	15.936	34.519	1.00	34.27
ATOM	1671	CA	MET	423	52.187	16.103	33.774	1.00	35.25
ATOM	1672	CB	MET	423	53.403	15.716	34.622	1.00	32.56
ATOM	1673	CG	MET	423	53.675	16.654	35.774	1.00	40.70
ATOM	1674	SD	MET	423	55.226	16.278	36.597	1.00	47.65
ATOM	1675	CE	MET	423	54.920	14.601	37.163	1.00	47.16
ATOM	1676	C	MET	423	52.164	15.254	32.502	1.00	35.13
ATOM	1677	O	MET	423	52.934	15.499	31.570	1.00	29.85
ATOM	1678	N	LYS	424	51.285	14.252	32.482	1.00	31.56
ATOM	1679	CA	LYS	424	51.152	13.384	31.316	1.00	32.29
ATOM	1680	CB	LYS	424	50.373	12.115	31.681	1.00	30.56
ATOM	1681	CG	LYS	424	51.106	11.178	32.631	1.00	30.07
ATOM	1682	CD	LYS	424	52.248	10.482	31.938	1.00	33.22
ATOM	1683	CE	LYS	424	53.059	9.593	32.875	1.00	28.75
ATOM	1684	NZ	LYS	424	53.868	10.383	33.833	1.00	31.01
ATOM	1685	C	LYS	424	50.435	14.150	30.197	1.00	29.26
ATOM	1686	O	LYS	424	50.719	13.944	29.030	1.00	30.22

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ATOM   1687  N   VAL   425      49.514  15.036  30.573  1.00 23.53
ATOM   1688  CA  VAL   425      48.792  15.849  29.601  1.00 28.91
ATOM   1689  CB  VAL   425      47.808  16.829  30.295  1.00 29.44
ATOM   1690  CG1 VAL   425      47.148  17.737  29.273  1.00 28.81
ATOM   1691  CG2 VAL   425      46.744  16.049  31.057  1.00 31.22
ATOM   1692  C.  VAL   425      49.822  16.669  28.831  1.00 32.03
ATOM   1693  O   VAL   425      49.771  16.769  27.605  1.00 31.95
ATOM   1694  N   THR   426      50.763  17.247  29.570  1.00 33.61
ATOM   1695  CA  THR   426      51.821  18.057  28.995  1.00 30.76
ATOM   1696  CB  THR   426      52.678  18.695  30.105  1.00 32.34
ATOM   1697  OG1 THR   426      51.842  19.535  30.912  1.00 33.07
ATOM   1698  CG2 THR   426      53.812  19.533  29.514  1.00 25.40
ATOM   1699  C   THR   426      52.712  17.225  28.086  1.00 32.53
ATOM   1700  O   THR   426      53.113  17.686  27.014  1.00 35.19
ATOM   1701  N   ASP   427      53.022  16.003  28.507  1.00 28.83
ATOM   1702  CA  ASP   427      53.858  15.130  27.695  1.00 35.12
ATOM   1703  CB  ASP   427      54.273  13.880  28.476  1.00 39.14
ATOM   1704  CG  ASP   427      55.122  14.212  29.693  1.00 45.80
ATOM   1705  OD1 ASP   427      56.052  15.034  29.556  1.00 41.97
ATOM   1706  OD2 ASP   427      54.869  13.642  30.775  1.00 50.06
ATOM   1707  C   ASP   427      53.124  14.726  26.422  1.00 33.94
ATOM   1708  O   ASP   427      53.737  14.617  25.362  1.00 38.02
ATOM   1709  N   LEU   428      51.818  14.512  26.529  1.00 27.15
ATOM   1710  CA  LEU   428      51.013  14.148  25.373  1.00 29.99
ATOM   1711  CB  LEU   428      49.602  13.719  25.802  1.00 22.49
ATOM   1712  CG  LEU   428      49.541  12.285  26.359  1.00 25.54
ATOM   1713  CD1 LEU   428      48.210  12.021  27.037  1.00 20.60
ATOM   1714  CD2 LEU   428      49.785  11.303  25.224  1.00 17.24
ATOM   1715  C   LEU   428      50.947  15.305  24.381  1.00 28.94
ATOM   1716  O   LEU   428      50.941  15.088  23.174  1.00 31.26
ATOM   1717  N   ARG   429      50.910  16.531  24.887  1.00 27.64
ATOM   1718  CA  ARG   429      50.877  17.694  24.011  1.00 28.13
ATOM   1719  CB  ARG   429      50.584  18.969  24.800  1.00 29.59
ATOM   1720  CG  ARG   429      49.224  18.980  25.455  1.00 34.85
ATOM   1721  CD  ARG   429      48.951  20.314  26.118  1.00 47.18
ATOM   1722  NE  ARG   429      47.657  20.358  26.797  1.00 57.93
ATOM   1723  CZ  ARG   429      46.473  20.193  26.200  1.00 63.62
ATOM   1724  NH1 ARG   429      46.402  19.972  24.889  1.00 60.71
ATOM   1725  NH2 ARG   429      45.356  20.257  26.919  1.00 62.38
ATOM   1726  C   ARG   429      52.229  17.819  23.304  1.00 29.81
ATOM   1727  O   ARG   429      52.294  18.209  22.143  1.00 30.81
ATOM   1728  N   MET   430      53.305  17.482  24.008  1.00 29.64
ATOM   1729  CA  MET   430      54.639  17.545  23.422  1.00 34.72
ATOM   1730  CB  MET   430      55.716  17.323  24.485  1.00 34.97
ATOM   1731  CG  MET   430      55.864  18.480  25.451  1.00 45.34
ATOM   1732  SD  MET   430      56.162  20.050  24.596  1.00 52.55
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ATOM   1733  CE  MET   430     57.598  19.639  23.589  1.00 55.56
ATOM   1734  C   MET   430     54.778  16.500  22.325  1.00 34.01
ATOM   1735  O   MET   430     55.440  16.733  21.318  1.00 37.29
ATOM   1736  N   ILE   431     54.161  15.340  22.533  1.00 29.99
ATOM   1737  CA  ILE   431     54.197  14.279  21.545  1.00 28.82
ATOM   1738  CB  ILE   431     53.523  12.984  22.095  1.00 27.39
ATOM   1739  CG2 ILE   431     53.260  11.989  20.956  1.00 23.87
ATOM   1740  CG1 ILE   431     54.414  12.386  23.201  1.00 25.56
ATOM   1741  CD1 ILE   431     53.850  11.155  23.896  1.00 17.29
ATOM   1742  C   ILE   431     53.450  14.785  20.301  1.00 29.49
ATOM   1743  O   ILE   431     53.908  14.603  19.174  1.00 24.19
ATOM   1744  N   GLY   432     52.311  15.435  20.524  1.00 25.25
ATOM   1745  CA  GLY   432     51.542  15.971  19.419  1.00 30.38
ATOM   1746  C   GLY   432     52.334  16.997  18.614  1.00 32.75
ATOM   1747  O   GLY   432     52.410  16.895  17.387  1.00 36.38
ATOM   1748  N   ALA   433     52.930  17.974  19.294  1.00 26.77
ATOM   1749  CA  ALA   433     53.711  19.012  18.625  1.00 26.48
ATOM   1750  CB  ALA   433     54.182  20.047  19.631  1.00 19.90
ATOM   1751  C   ALA   433     54.902  18.407  17.890  1.00 30.73
ATOM   1752  O   ALA   433     55.207  18.787  16.760  1.00 31.60
ATOM   1753  N   CYS   434     55.582  17.467  18.537  1.00 33.22
ATOM   1754  CA  CYS   434     56.728  16.801  17.914  1.00 34.34
ATOM   1755  CB  CYS   434     57.339  15.808  18.895  1.00 35.20
ATOM   1756  SG  CYS   434     59.191  15.745  18.798  1.00 54.48
ATOM   1757  C   CYS   434     56.313  16.052  16.636  1.00 34.09
ATOM   1758  O   CYS   434     57.095  15.937  15.679  1.00 34.89
ATOM   1759  N   HIS   435     55.088  15.545  16.642  1.00 34.30
ATOM   1760  CA  HIS   435     54.570  14.818  15.501  1.00 35.44
ATOM   1761  CB  HIS   435     53.296  14.061  15.886  1.00 31.76
ATOM   1762  CG  HIS   435     52.587  13.469  14.715  1.00 32.03
ATOM   1763  CD2 HIS   435     52.735  12.277  14.092  1.00 28.61
ATOM   1764  ND1 HIS   435     51.665  14.177  13.970  1.00 28.48
ATOM   1765  CE1 HIS   435     51.284  13.453  12.941  1.00 33.27
ATOM   1766  NE2 HIS   435     51.920  12.284  12.985  1.00 31.57
ATOM   1767  C   HIS   435     54.311  15.750  14.319  1.00 32.74
ATOM   1768  O   HIS   435     54.504  15.363  13.175  1.00 32.87
ATOM   1769  N   ALA   436     53.881  16.975  14.608  1.00 31.01
ATOM   1770  CA  ALA   436     53.628  17.966  13.571  1.00 29.91
ATOM   1771  CB  ALA   436     53.221  19.290  14.197  1.00 21.23
ATOM   1772  C   ALA   436     54.911  18.135  12.769  1.00 33.86
ATOM   1773  O   ALA   436     54.892  18.128  11.541  1.00 36.10
ATOM   1774  N   SER   437     56.030  18.266  13.483  1.00 35.19
ATOM   1775  CA  SER   437     57.344  18.426  12.871  1.00 33.03
ATOM   1776  CB  SER   437     58.389  18.720  13.941  1.00 35.31
ATOM   1777  OG  SER   437     59.681  18.782  13.373  1.00 44.99
ATOM   1778  C   SER   437     57.758  17.178  12.100  1.00 38.39
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ATOM   1779  O   SER   437   58.374  17.269  11.034  1.00 37.54
ATOM   1780  N   ARG   438   57.427  16.012  12.642  1.00 37.32
ATOM   1781  CA  ARG   438   57.762  14.754  11.992  1.00 39.30
ATOM   1782  CB  ARG   438   57.517  13.572  12.941  1.00 42.97
ATOM   1783  CG  ARG   438   58.542  13.436  14.059  1.00 41.72
ATOM   1784  CD  ARG   438   59.926  13.212  13.484  1.00 45.23
ATOM   1785  NE  ARG   438   59.961  12.050  12.601  1.00 45.66
ATOM   1786  CZ  ARG   438   60.935  11.804  11.731  1.00 49.71
ATOM   1787  NH1 ARG   438   61.961  12.641  11.627  1.00 50.91
ATOM   1788  NH2 ARG   438   60.885  10.727  10.960  1.00 46.86
ATOM   1789  C   ARG   438   56.939  14.565  10.725  1.00 42.37
ATOM   1790  O   ARG   438   57.311  13.794   9.841  1.00 40.58
ATOM   1791  N   PHE   439   55.816  15.269  10.645  1.00 42.25
ATOM   1792  CA  PHE   439   54.957  15.170   9.479  1.00 42.81
ATOM   1793  CB  PHE   439   53.593  15.790   9.771  1.00 42.18
ATOM   1794  CG  PHE   439   52.594  15.597   8.656  1.00 42.48
ATOM   1795  CD1 PHE   439   52.173  14.312   8.295  1.00 47.09
ATOM   1796  CD2 PHE   439   52.086  16.696   7.961  1.00 39.76
ATOM   1797  CE1 PHE   439   51.256  14.110   7.234  1.00 49.17
ATOM   1798  CE2 PHE   439   51.174  16.524   6.896  1.00 45.10
ATOM   1799  CZ  PHE   439   50.751  15.225   6.532  1.00 46.36
ATOM   1800  C   PHE   439   55.626  15.905   8.322  1.00 44.79
ATOM   1801  O   PHE   439   55.596  15.444   7.181  1.00 40.26
ATOM   1802  N   LEU   440   56.236  17.049   8.629  1.00 42.77
ATOM   1803  CA  LEU   440   56.927  17.839   7.621  1.00 42.96
ATOM   1804  CB  LEU   440   57.421  19.156   8.216  1.00 37.19
ATOM   1805  CG  LEU   440   56.348  20.117   8.725  1.00 36.97
ATOM   1806  CD1 LEU   440   57.020  21.338   9.321  1.00 33.65
ATOM   1807  CD2 LEU   440   55.411  20.519   7.572  1.00 35.42
ATOM   1808  C   LEU   440   58.106  17.063   7.053  1.00 45.47
ATOM   1809  O   LEU   440   58.421  17.191   5.876  1.00 52.48
ATOM   1810  N   HIS   441   58.760  16.266   7.890  1.00 49.15
ATOM   1811  CA  HIS   441   59.893  15.473   7.435  1.00 54.76
ATOM   1812  CB  HIS   441   60.723  14.964   8.624  1.00 56.68
ATOM   1813  CG  HIS   441   61.515  16.026   9.323  1.00 62.73
ATOM   1814  CD2 HIS   441   62.851  16.166   9.508  1.00 65.73
ATOM   1815  ND1 HIS   441   60.929  17.098   9.966  1.00 66.01
ATOM   1816  CE1 HIS   441   61.871  17.845  10.518  1.00 65.55
ATOM   1817  NE2 HIS   441   63.044  17.306  10.258  1.00 60.09
ATOM   1818  C   HIS   441   59.417  14.292   6.589  1.00 55.93
ATOM   1819  O   HIS   441   60.084  13.908   5.630  1.00 57.33
ATOM   1820  N   MET   442   58.271  13.716   6.948  1.00 57.81
ATOM   1821  CA  MET   442   57.712  12.585   6.203  1.00 59.11
ATOM   1822  CB  MET   442   56.562  11.924   6.978  1.00 55.93
ATOM   1823  CG  MET   442   56.961  11.246   8.276  1.00 58.52
ATOM   1824  SD  MET   442   55.564  10.420   9.105  1.00 60.99
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ATOM	1825	CE	MET	442	54.430	11.779	9.350	1.00	52.61
ATOM	1826	C	MET	442	57.178	13.065	4.854	1.00	60.31
ATOM	1827	O	MET	442	57.279	12.369	3.846	1.00	58.18
ATOM	1828	N	LYS	443	56.608	14.266	4.863	1.00	61.45
ATOM	1829	CA	LYS	443	56.038	14.871	3.669	1.00	64.90
ATOM	1830	CB	LYS	443	55.434	16.232	4.035	1.00	64.40
ATOM	1831	CG	LYS	443	54.589	16.872	2.945	1.00	69.12
ATOM	1832	CD	LYS	443	54.064	18.250	3.363	1.00	71.14
ATOM	1833	CE	LYS	443	53.138	18.183	4.575	1.00	73.43
ATOM	1834	NZ	LYS	443	52.668	19.534	5.015	1.00	67.97
ATOM	1835	C	LYS	443	57.112	15.030	2.585	1.00	67.29
ATOM	1836	O	LYS	443	56.800	15.218	1.406	1.00	67.90
ATOM	1837	N	VAL	444	58.373	14.941	2.996	1.00	66.57
ATOM	1838	CA	VAL	444	59.501	15.064	2.078	1.00	64.76
ATOM	1839	CB	VAL	444	60.618	15.940	2.693	1.00	62.76
ATOM	1840	CG1	VAL	444	61.767	16.092	1.712	1.00	64.00
ATOM	1841	CG2	VAL	444	60.062	17.301	3.072	1.00	59.27
ATOM	1842	C	VAL	444	60.091	13.693	1.744	1.00	68.61
ATOM	1843	O	VAL	444	60.145	13.294	0.577	1.00	70.60
ATOM	1844	N	GLU	445	60.520	12.972	2.775	1.00	70.71
ATOM	1845	CA	GLU	445	61.129	11.653	2.609	1.00	71.45
ATOM	1846	CB	GLU	445	61.808	11.233	3.916	1.00	72.36
ATOM	1847	C	GLU	445	60.181	10.547	2.148	1.00	71.46
ATOM	1848	O	GLU	445	60.588	9.390	2.042	1.00	73.02
ATOM	1849	N	CYS	446	58.925	10.895	1.871	1.00	71.12
ATOM	1850	CA	CYS	446	57.945	9.901	1.419	1.00	70.83
ATOM	1851	CB	CYS	446	57.031	9.485	2.581	1.00	71.05
ATOM	1852	SG	CYS	446	57.845	8.593	3.925	1.00	72.83
ATOM	1853	C	CYS	446	57.081	10.390	0.261	1.00	71.91
ATOM	1854	O	CYS	446	56.776	11.582	0.155	1.00	72.06
ATOM	1855	N	PRO	447	56.673	9.470	-0.635	1.00	73.12
ATOM	1856	CD	PRO	447	56.967	8.026	-0.671	1.00	72.88
ATOM	1857	CA	PRO	447	55.837	9.825	-1.784	1.00	74.22
ATOM	1858	CB	PRO	447	55.717	8.500	-2.537	1.00	72.98
ATOM	1859	CG	PRO	447	57.015	7.790	-2.161	1.00	74.77
ATOM	1860	C	PRO	447	54.479	10.343	-1.330	1.00	75.94
ATOM	1861	O	PRO	447	53.754	9.652	-0.616	1.00	76.67
ATOM	1862	N	THR	448	54.145	11.558	-1.755	1.00	76.91
ATOM	1863	CA	THR	448	52.879	12.197	-1.403	1.00	78.24
ATOM	1864	CB	THR	448	52.647	13.459	-2.261	1.00	81.33
ATOM	1865	OG1	THR	448	52.552	13.087	-3.643	1.00	84.46
ATOM	1866	CG2	THR	448	53.802	14.444	-2.089	1.00	83.51
ATOM	1867	C	THR	448	51.676	11.270	-1.580	1.00	77.42
ATOM	1868	O	THR	448	50.662	11.413	-0.894	1.00	77.65
ATOM	1869	N	GLU	449	51.795	10.319	-2.502	1.00	76.29
ATOM	1870	CA	GLU	449	50.720	9.375	-2.783	1.00	75.03

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ATOM   1871  CB  GLU   449      51.048   8.572  -4.043  1.00 74.62
ATOM   1872  C   GLU   449      50.445   8.421  -1.622  1.00 73.49
ATOM   1873  O   GLU   449      49.310   7.973  -1.442  1.00 70.24
ATOM   1874  N   LEU   450      51.477   8.113  -0.840  1.00 70.80
ATOM   1875  CA  LEU   450      51.327   7.194   0.285  1.00 68.82
ATOM   1876  CB  LEU   450      52.693   6.644   0.705  1.00 71.91
ATOM   1877  CG  LEU   450      53.428   5.795  -0.336  1.00 76.62
ATOM   1878  CD1 LEU   450      54.799   5.414   0.195  1.00 77.95
ATOM   1879  CD2 LEU   450      52.617   4.546  -0.662  1.00 76.46
ATOM   1880  C   LEU   450      50.636   7.818   1.492  1.00 66.22
ATOM   1881  O   LEU   450      50.501   7.181   2.540  1.00 66.01
ATOM   1882  N   PHE   451      50.189   9.060   1.342  1.00 61.96
ATOM   1883  CA  PHE   451      49.513   9.750   2.428  1.00 58.44
ATOM   1884  CB  PHE   451      50.006  11.204   2.528  1.00 61.34
ATOM   1885  CG  PHE   451      51.466  11.343   2.923  1.00 63.02
ATOM   1886  CD1 PHE   451      52.488  10.888   2.077  1.00 62.92
ATOM   1887  CD2 PHE   451      51.812  11.932   4.146  1.00 63.07
ATOM   1888  CE1 PHE   451      53.855  11.029   2.437  1.00 65.12
ATOM   1889  CE2 PHE   451      53.167  12.085   4.531  1.00 64.66
ATOM   1890  CZ  PHE   451      54.195  11.628   3.673  1.00 67.12
ATOM   1891  C   PHE   451      48.005   9.756   2.219  1.00 56.41
ATOM   1892  O   PHE   451      47.501  10.471   1.350  1.00 56.56
ATOM   1893  N   PRO   452      47.260   8.954   3.009  1.00 53.28
ATOM   1894  CD  PRO   452      47.678   8.027   4.076  1.00 50.46
ATOM   1895  CA  PRO   452      45.797   8.910   2.866  1.00 50.26
ATOM   1896  CB  PRO   452      45.388   7.976   4.000  1.00 49.19
ATOM   1897  CG  PRO   452      46.558   7.010   4.039  1.00 45.89
ATOM   1898  C   PRO   452      45.183  10.305   2.974  1.00 49.62
ATOM   1899  O   PRO   452      45.727  11.176   3.644  1.00 52.35
ATOM   1900  N   PRO   453      44.034  10.530   2.313  1.00 51.50
ATOM   1901  CD  PRO   453      43.257   9.585   1.494  1.00 49.66
ATOM   1902  CA  PRO   453      43.354  11.830   2.335  1.00 50.89
ATOM   1903  CB  PRO   453      42.101  11.559   1.506  1.00 51.49
ATOM   1904  CG  PRO   453      42.600  10.524   0.521  1.00 50.82
ATOM   1905  C   PRO   453      43.030  12.405   3.706  1.00 50.99
ATOM   1906  O   PRO   453      43.264  13.588   3.953  1.00 54.17
ATOM   1907  N   LEU   454      42.479  11.576   4.592  1.00 51.21
ATOM   1908  CA  LEU   454      42.112  12.034   5.936  1.00 47.17
ATOM   1909  CB  LEU   454      41.305  10.951   6.660  1.00 44.44
ATOM   1910  CG  LEU   454      40.748  11.283   8.050  1.00 41.33
ATOM   1911  CD1 LEU   454      39.838  12.504   7.978  1.00 35.93
ATOM   1912  CD2 LEU   454      39.986  10.072   8.587  1.00 34.79
ATOM   1913  C   LEU   454      43.363  12.380   6.733  1.00 42.25
ATOM   1914  O   LEU   454      43.387  13.357   7.475  1.00 40.82
ATOM   1915  N   PHE   455      44.399  11.567   6.565  1.00 39.29
ATOM   1916  CA  PHE   455      45.674  11.774   7.240  1.00 41.81
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ATOM   1917  CB  PHE   455      46.655  10.679   6.802  1.00 47.22
ATOM   1918  CG  PHE   455      48.045  10.800   7.407  1.00 56.97
ATOM   1919  CD1 PHE   455      48.220  10.990   8.785  1.00 57.23
ATOM   1920  CD2 PHE   455      49.180  10.645   6.597  1.00 59.40
ATOM   1921  CE1 PHE   455      49.522  11.030   9.362  1.00 56.58
ATOM   1922  CE2 PHE   455      50.487  10.682   7.149  1.00 61.80
ATOM   1923  CZ  PHE   455      50.656  10.870   8.541  1.00 59.94
ATOM   1924  C   PHE   455      46.203  13.161   6.892  1.00 45.12
ATOM   1925  O   PHE   455      46.558  13.944   7.779  1.00 39.95
ATOM   1926  N   LEU   456      46.236  13.471   5.592  1.00 43.92
ATOM   1927  CA  LEU   456      46.704  14.767   5.123  1.00 44.08
ATOM   1928  CB  LEU   456      46.748  14.795   3.593  1.00 50.20
ATOM   1929  CG  LEU   456      47.796  13.921   2.903  1.00 55.79
ATOM   1930  CD1 LEU   456      47.527  13.869   1.408  1.00 54.70
ATOM   1931  CD2 LEU   456      49.187  14.473   3.193  1.00 53.01
ATOM   1932  C   LEU   456      45.782  15.871   5.616  1.00 44.65
ATOM   1933  O   LEU   456      46.219  16.987   5.887  1.00 45.93
ATOM   1934  N   GLU   457      44.500  15.549   5.726  1.00 44.56
ATOM   1935  CA  GLU   457      43.498  16.504   6.175  1.00 46.37
ATOM   1936  CB  GLU   457      42.138  15.854   6.133  1.00 50.16
ATOM   1937  C   GLU   457      43.759  17.039   7.579  1.00 43.60
ATOM   1938  O   GLU   457      43.867  18.245   7.795  1.00 42.69
ATOM   1939  N   VAL   458      43.847  16.117   8.528  1.00 43.21
ATOM   1940  CA  VAL   458      44.064  16.446   9.930  1.00 44.98
ATOM   1941  CB  VAL   458      44.020  15.159  10.802  1.00 44.83
ATOM   1942  CG1 VAL   458      44.180  15.510  12.277  1.00 49.72
ATOM   1943  CG2 VAL   458      42.708  14.427  10.567  1.00 40.89
ATOM   1944  C   VAL   458      45.368  17.178  10.209  1.00 42.72
ATOM   1945  O   VAL   458      45.393  18.139  10.974  1.00 42.88
ATOM   1946  N   PHE   459      46.451  16.743   9.574  1.00 44.53
ATOM   1947  CA  PHE   459      47.741  17.366   9.823  1.00 48.18
ATOM   1948  CB  PHE   459      48.784  16.269  10.064  1.00 43.60
ATOM   1949  CG  PHE   459      48.374  15.276  11.133  1.00 40.79
ATOM   1950  CD1 PHE   459      47.835  14.032  10.783  1.00 41.01
ATOM   1951  CD2 PHE   459      48.471  15.613  12.492  1.00 39.48
ATOM   1952  CE1 PHE   459      47.387  13.118  11.776  1.00 40.62
ATOM   1953  CE2 PHE   459      48.032  14.715  13.506  1.00 36.87
ATOM   1954  CZ  PHE   459      47.489  13.463  13.146  1.00 36.39
ATOM   1955  C   PHE   459      48.234  18.348   8.763  1.00 52.71
ATOM   1956  O   PHE   459      49.336  18.878   8.877  1.00 51.34
ATOM   1957  N   GLU   460      47.397  18.594   7.752  1.00 59.56
ATOM   1958  CA  GLU   460      47.695  19.509   6.647  1.00 66.14
ATOM   1959  CB  GLU   460      47.818  20.944   7.158  1.00 67.76
ATOM   1960  CG  GLU   460      46.536  21.511   7.724  1.00 78.99
ATOM   1961  CD  GLU   460      46.680  22.965   8.116  1.00 86.08
ATOM   1962  OE1 GLU   460      47.014  23.786   7.237  1.00 87.62
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ATOM	1963	OE2	GLU	460	46.460	23.289	9.301	1.00 91.63	
ATOM	1964	C	GLU	460	48.940	19.163	5.836	1.00 69.17	
ATOM	1965	O	GLU	460	48.784	18.759	4.660	1.00 69.49	
ATOM	1966	OXT	GLU	460	50.057	19.298	6.379	1.00 76.70	
ATOM	1967	C1	TRI	1	47.283	4.313	16.972	1.00 44.70	
ATOM	1968	C2	TRI	1	51.052	6.807	13.814	1.00 34.01	
ATOM	1969	C3	TRI	1	47.289	4.043	15.500	1.00 37.90	
ATOM	1970	C4	TRI	1	51.936	6.615	12.728	1.00 33.38	
ATOM	1971	C5	TRI	1	48.462	4.501	14.746	1.00 46.53	
ATOM	1972	C6	TRI	1	52.294	7.653	11.847	1.00 42.90	
ATOM	1973	C7	TRI	1	49.577	5.179	15.334	1.00 34.63	
ATOM	1974	C8	TRI	1	51.717	9.015	12.071	1.00 38.34	
ATOM	1975	C9	TRI	1	49.492	5.383	16.723	1.00 43.89	
ATOM	1976	C10	TRI	1	50.779	9.237	13.172	1.00 40.43	
ATOM	1977	C11	TRI	1	48.354	4.960	17.533	1.00 41.82	
ATOM	1978	C12	TRI	1	50.449	8.116	14.055	1.00 35.64	
ATOM	1979	C13	TRI	1	46.287	3.725	17.959	1.00 36.78	
ATOM	1980	C15	TRI	1	44.825	4.150	17.865	1.00 40.69	
ATOM	1981	I1	TRI	1	48.684	4.002	12.609	1.00 40.26	
ATOM	1982	I2	TRI	1	53.597	7.174	10.336	1.00 46.70	
ATOM	1983	I3	TRI	1	51.362	6.218	17.644	1.00 36.54	
ATOM	1984	O3	TRI	1	44.546	5.255	17.329	1.00 54.78	
ATOM	1985	O2	TRI	1	50.831	5.617	14.667	1.00 28.44	
ATOM	1986	O1	TRI	1	52.207	10.160	11.342	1.00 43.65	
ATOM	1987	O4	TRI	1	44.021	3.333	18.352	1.00 42.95	
ATOM	1	AS	CAC	501	60.548	16.977	16.916	1.00 65.97	AS
ATOM	2	AS	CAC	502	27.863	16.627	16.796	1.00 89.34	AS
ATOM	3	AS	CAC	503	29.889	28.698	21.811	1.00100.00	AS
ATOM	4	AS	CAC	504	33.547	24.203	8.880	1.00100.00	AS
ATOM	5	O	HOH	505	42.365	8.872	4.597	1.00 53.88	HOH
ATOM	6	O	HOH	506	33.545	30.973	24.585	1.00 40.33	HOH
ATOM	7	O	HOH	507	37.040	1.824	12.671	1.00 61.87	HOH
ATOM	8	O	HOH	508	44.105	4.635	6.023	1.00 40.68	HOH
ATOM	9	O	HOH	509	52.686	13.817	-6.263	1.00 54.00	HOH
ATOM	10	O	HOH	510	50.186	12.691	-5.997	1.00 55.36	HOH
ATOM	11	O	HOH	511	49.278	18.540	14.006	1.00 34.79	HOH
ATOM	12	O	HOH	512	25.541	28.885	21.206	1.00 55.42	HOH
ATOM	13	O	HOH	513	27.346	31.063	27.398	1.00 58.30	HOH
ATOM	14	O	HOH	514	40.790	19.192	39.234	1.00 50.35	HOH
ATOM	15	O	HOH	515	37.467	0.637	37.293	1.00 37.46	HOH
ATOM	16	O	HOH	516	36.155	3.879	47.189	1.00 61.37	HOH
ATOM	17	O	HOH	517	35.410	5.865	50.995	1.00 63.46	HOH
ATOM	18	O	HOH	518	33.622	5.440	47.570	1.00 53.87	HOH
ATOM	19	O	HOH	519	64.787	6.888	11.882	1.00 51.15	HOH
ATOM	20	O	HOH	520	61.109	-8.688	27.722	1.00 61.70	HOH
ATOM	21	O	HOH	521	49.869	-5.472	30.343	1.00 40.50	HOH

ATOM	22	O	HOH	522	43.786	-0.987	26.878	1.00	52.16	HOH
ATOM	23	O	HOH	523	41.604	2.361	26.985	1.00	47.90	HOH
ATOM	24	O	HOH	524	54.405	6.361	39.795	1.00	56.56	HOH
ATOM	25	O	HOH	525	46.088	0.770	33.095	1.00	74.24	HOH
ATOM	26	O	HOH	526	50.481	16.245	15.314	1.00	28.99	HOH
ATOM	27	O	HOH	527	59.788	14.863	21.416	1.00	50.02	HOH
ATOM	28	O	HOH	528	49.282	19.490	32.191	1.00	41.61	HOH
ATOM	29	O	HOH	529	56.683	10.961	26.733	1.00	34.20	HOH
ATOM	30	O	HOH	530	56.701	9.852	30.561	1.00	51.24	HOH
ATOM	31	O	HOH	531	26.487	13.273	30.591	1.00	43.94	HOH
ATOM	32	O	HOH	532	27.019	25.052	28.330	1.00	54.97	HOH
ATOM	33	O	HOH	533	50.689	1.918	29.551	1.00	30.63	HOH
ATOM	34	O	HOH	534	47.867	0.200	31.330	1.00	43.14	HOH
ATOM	35	O	HOH	535	61.434	-0.721	23.218	1.00	49.83	HOH
ATOM	36	O	HOH	536	41.969	20.017	20.894	1.00	27.00	HOH
ATOM	37	O	HOH	537	46.897	16.244	15.992	1.00	31.50	HOH
ATOM	38	O	HOH	538	29.796	16.276	27.000	1.00	38.52	HOH
ATOM	39	O	HOH	539	47.853	23.205	20.217	1.00	44.39	HOH
ATOM	40	O	HOH	540	40.956	24.775	31.717	1.00	50.36	HOH
ATOM	41	O	HOH	541	43.310	1.560	41.912	1.00	43.56	HOH

END